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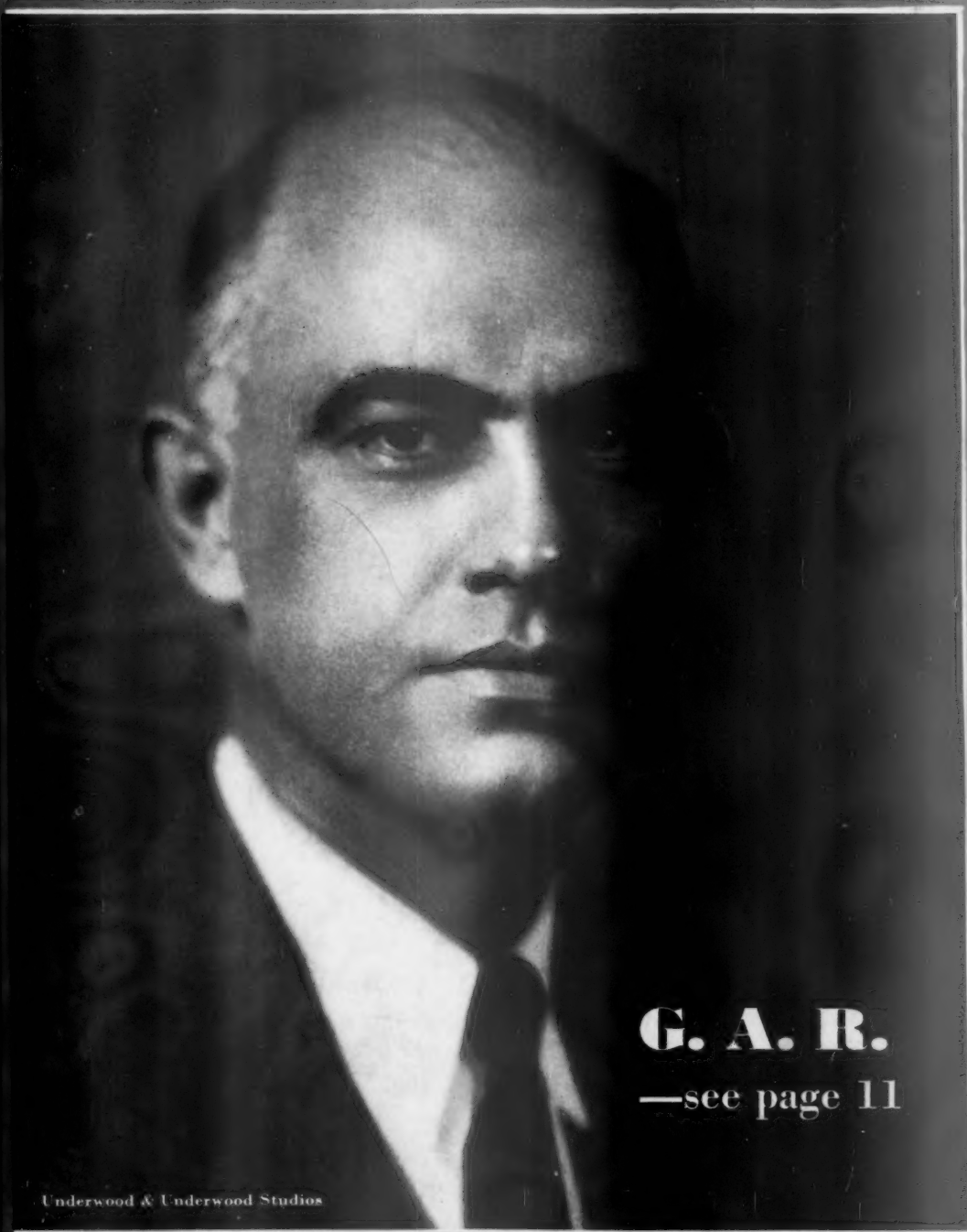
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PURCHASING

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Underwood & Underwood Studios

G. A. R.
—see page 11

Vol. IV No. 4

APRIL 1936

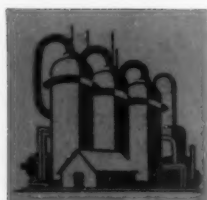


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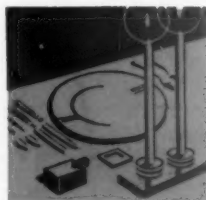
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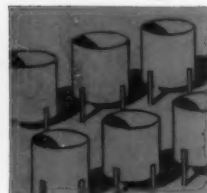
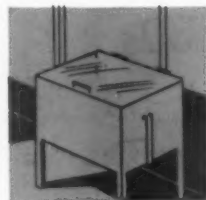
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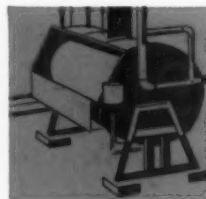


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PURCHASING

Established 1915 as "The Purchasing Agent"
Consolidated with "The Executive Purchaser"

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An INTERNATIONAL *Value*

MAIL

Re: Research

To the Editor:

Having read with interest the article in your March, 1936, issue entitled "Research and Development," I note the writer's assertion that industry must either provide a greater measure of support to the university research laboratory or shoulder the research task itself. Have you ever considered the third alternative of the commercial laboratory? There are commercial laboratories having the personnel, the equipment, and the experience required for competent research in many fields. Why ignore them?

CHAS. H. ROE
Commercial Engineer
Electrical Testing Laboratories

New York City
March 23, 1936

PURCHASING and purchasing men are keenly interested in the third alternative; may find it in fact ranking first in importance as the immediate answer to their problems of research; look forward to an informative article on the facilities and services of commercial laboratories, scheduled to appear in an early issue.

Price Trends

To the Editor:

One of the most important problems which confront purchasing agents is the difficulty of anticipating price changes for the near future because of the unprecedented economic and price developments of the past three years. Since early 1933 business activity has registered an increase that measures 56%. During the same period the stock market has climbed 280% (Dow-Jones Industrials). Meanwhile, commodity prices have advanced 68%. The bulk of this advance materialized prior to the revaluation of gold.

Students of economic conditions generally agree that during the next half decade new production records exceeding the peaks of 1929 will be chronicled. The outlook for the stock market from a long-swing standpoint remains bullish. In view of this background the question is "Will commodity prices continue the broad revival that started three years ago, or was a peak reached in 1935?" The evidence shows that during the first quarter of 1936 the trend of prices was downward.

There are three phases that the purchasing agent should bear in mind when studying economic trends for the purpose of determining what the prospective price level will be one, two, and three years hence. First is: that, based on the valuable experience of the past and the

criteria that may be deduced from an inspection of price levels for more than one hundred years, prices when free from war scares hold within a comparatively narrow range. Purchasing agents should study the action of prices during periods of activity above and below normal back to 1830, which will bear out the statement that eliminating the terrific gyrations caused by war, prices constantly fluctuate within a ratio of 25% above and 25% below the base period.

The second phase of outstanding interest is the potential effect of credit inflation upon commodity prices. There must be some correlation between commodity prices, employment, and purchasing power. The era that comes nearest to approaching the prospective credit expansion period that is ahead was noted in the seven-year period 1923 through 1929. During that time new production records were reached in the majority of industries. The stock market climbed nearly 400% in the short time of five years prior to 1929. Installment selling reached unprecedented levels, yet the underlying trend of commodity prices during this boom period was fundamentally downward.

The third angle involves the effect on prices by a return of mass-production, rapid-turnover, small-profit-margin principles. In 1935 all-time high production records were reached in sixteen important industries, six established the highest level since 1929, and eight the highest volume since 1930. American industry is again returning to the mass-production, rapid-turnover, small-profit-margin principles aided by definite stimulation in installment selling.

Realizing that commodity prices advanced 68% from the low of 1933 and that a portion of this advance has been due to forced measures rather than to any material strengthening in the supply-to-demand ratio of raw materials and finished goods, it could easily develop that the price structure will prove sensitive to higher production schedules and expanding distribution by following a course similar to the moderate downward trend recorded in the five-year period prior to 1929. This brings up the question "Has the peak in commodity prices already been reached as evidenced by the peak in late 1935, or will new highs be established in late 1936 and early 1937, representing the peak from which prices will record a moderate and irregular downward course?"

Frankly, when an impartial study is made of economic, financial, and industrial trends there is no prospect of any unusual price developments in 1936.

Any elevation in the industrial group as a result of expanding industrial activity could easily be offset by weakness in the agricultural group and lower livestock prices during the latter part of the year.

In summarizing this problem of the future status of commodity prices some consideration should be given to the premise that while the next few years promise a higher level of business activity, new production records in industry, expanding consumption, an increase in employment, broadening purchasing power, favorable earnings, and new peaks in the stock market, such a background does not necessarily mean that commodity prices are destined to average on a higher plane.

H. N. MCGILL

President

McGill Commodity Service, Inc.
Auburndale, Mass.
April 3, 1936

Thoughtful and authoritative is this discussion of factors to be considered in anticipating probable price trends, but, like all excursions into the problematical future, it is subject to differences of opinion. PURCHASING welcomes additional expressions and views on the subject, whether in support of or counter to Mr. McGill's conclusions.

Help Wanted

To the Editor:

May I ask you to publish a problem in purchasing which many buyers experience? We purchase considerable ferrous castings, both malleable and grey iron, which must be free of all porosity and when machined must stand specified air or steam pressure. Our sources of supply are efficient and reliable. They have furnished good castings. However, we have experienced some loss of machining labor due to porosity. In some cases the labor lost amounts to more than the cost of the castings. Inasmuch as the foundries have made the castings satisfactorily on several occasions, they should stand the labor expense in addition to value of the raw casting. The buyer should not be penalized. It will be interesting to know the experience of other buyers. If you will publish this, as well as any answers, your cooperation will be greatly appreciated.

FRANK M. ROOS

Purchasing Agent

Consolidated Car-Heating Co., Inc.
Albany, N. Y.
April 3, 1936

Reports of satisfactory experience in dealing with this problem will be valuable not only to Reader Roos, but to all buyers of castings.

Welcome

I am sure I express the sentiment of the entire membership of our Association when I say we are glad to note from the *National Bulletin* of March 18th that you

will again publish the magazine PURCHASING.

S. J. JOHNSTON
P.A., Acme Brick Company
Secy., P.A.A. of Forth Worth
Fort Worth, Texas
March 23, 1936

I was much pleased to learn that you are going back into the purchasing publication field. I think you can do a better job at that than anyone else in the country. I join that large body who will be wishing you all kinds of success.

CHAS. E. STONE
President
Interstate Drop Forge Co.
Milwaukee, Wis.
March 18, 1936

I want to take this opportunity to tell you that I am pleased to hear of your re-entry into the publishing business, particularly as it affects purchasing, and hope that the venture will be altogether successful.

E. H. HAWKINS
Purchasing Agent
E. I. du Pont de Nemours & Co.
Wilmington, Del.
April 1, 1936

I am very much pleased to know that you are returning to the place that is rightfully yours, and I know that the new PURCHASING will prove highly entertaining and valuable under your leadership. I wish the new combination every success that it deserves.

J. W. HARRINGTON
Purchasing Agent
Greenfield Tap & Die Corp.
Greenfield, Mass.
March 31, 1936

Dr. McAllister and I extend to you our good wishes for your success. We want you to know that we shall be glad to render whatever service we can in assisting you in your venture.

R. A. MARTINO
Div. of Codes and Specifications
National Bureau of Standards
U. S. Dept. of Commerce
Washington, D. C.
March 20, 1936

I wish to take this opportunity to extend my congratulations and best wishes for the success of your new enterprise.

LAWRENCE S. MAYERS
L. & C. Mayers Company
New York City
March 20, 1936

Very glad to note that you are again at the controls of PURCHASING magazine. . . Lots of luck.

LEON H. LEWIS
Cruttenden & Eger
Chicago, Ill.
March 27, 1936

To these and scores of other well-wishers, our sincere appreciation, and the assurance that PURCHASING will exert every effort to justify their confidence and continued support.

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Quick Turnover

NEVER SAY "Yes" IF THE ANSWER IS "No"

- The modern H & D shipping box is colorful and attractive. In transit, it advertises your products to thousands. In the retail store, it attracts attention, promotes acceptance and increases sales. Dealers naturally push fast moving items and place them out in front. For quick turnover, use H & D corrugated boxes. A copy of the illustrated loose-leaf book, "Modern Shipping Boxes" is yours upon request. Send for your copy.

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340 Decatur St. Sandusky, Ohio

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Ryerson Steel-Service is well known for its ability to accomplish the seemingly impossible, so do not hesitate to call. No matter what the problem, we probably can help you. Our whole organization, large stocks, complete facilities and fleet of trucks are at your service night or day until the job is done.

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S T E E L - S E R V I C E

Getting Technical

ASK the typical technical man for an informative discussion of what a purchasing agent ought to know about his particular product in order to buy intelligently, and four times out of five his discourse will promptly turn to the theme that the only sound course is to call in a technical expert or to select a reliable, well-established manufacturer, and to leave the matter in their hands with perfect confidence. This sincere and well-meant advice, characteristic of the specialist's viewpoint, is based on the popular conception that any detailed consideration of the subject would be "too technical" for the lay mind of the buyer.

Competent counsel is always desirable. And it is hard to conceive of any satisfactory business relationship that is not based on confidence. But to rely on these factors to the extent of relinquishing all right of judgment, comparison and selection is the negation of the very elements of good purchasing. Without in the least degree impugning the motives of the counsellor or the conscientiousness of the prospective vendor, we may fervently exclaim, Heaven have mercy on the concern or the purchasing department which settles its materials problems solely on that basis.

There are two major fallacies in the attitude. One is the recent but notable development of technically competent purchasing personnel. Coincident with the advent of the sales engineer, though not so highly publicized nor so prominently labelled, has been the advent of the purchase engineer. He is no less of a reality in industry today—the purchasing man who through training and experience is equipped to talk the language of the technical expert, to form his own opinion on the engineering aspects of a given project, and to evaluate it in terms of his own company's requirement. The recent N.A.P.A. study of education and background in the purchasing field strikingly brings out the extent to which engineering training and experience is even now being applied to purchasing work, and, what is still more significant, the increasing importance which is attached to such preparation in the selection of tomorrow's buyers.

The second fallacy lies in one notorious weakness of our present system of technical education, stressing a knowledge of physical properties and a respect for excellence without according a corresponding degree of attention to the factor of value. And value, the commercial viewpoint which correlates quality and price, which recognizes both the economy of adequate quality and also the waste inherent in excessive quality for a given purpose is the inescapable responsibility of the purchaser. If the quality-price pendulum has sometimes swung too far to one extreme of its course, the situation is not going to be measurably improved by pushing it just as far to the other extreme.

Significant, and worthy of the highest commendation, is the action of A.S.M.E. in appointing a committee of executives who are at the same time representative engineers and representative purchasing men (and despite the popular misconception, there are plenty of competent men who fit this dual specification) to develop purchasing information as applied to engineering problems, to show the importance of price and commercial practice data in the formulation of design, standards, tolerances, and quality specifications. Such a program will mean much toward greater industrial efficiency. It is "getting technical" in a very practical and common sense fashion.

STUART F. HEINRITZ, EDITOR

Edgerton discusses:

Selection of Shipping Containers

THE sixth annual Packing and Shipping Conference was held last month at the Pennsylvania Hotel, New York City, under the auspices of the American Management Association. Stuart T. Edgerton, Division Purchasing Agent of U. S. Rubber Products, Inc., addressed the conference on the selection of shipping containers.

Cooperation

Mr. Edgerton declared that the selection and procurement of such containers is essentially a purchasing department function, comparable to the selection of other materials and supplies, and calling for the same care, inquiry, and discretion. The purchasing agent, however, should seek the cooperation and aid of other executives to assure a thoroughly satisfactory selection.

The *factory planning engineer* can contribute his knowledge of factory conditions, including conveyor equipment, packaging and sealing equipment, and production machinery layout, all of which have a bearing on the type to be chosen.

The *manager of the shipping department* has pertinent knowledge of trucking and railroad handling, and should keep up-to-date with that chapter of the railroad and container "bible" known as *Rule Forty-one*.

The *sales manager* knows trade practices and customs regarding particular commodities, and also knows what sort of container is most acceptable to his customers.

Various Types

There are a number of different packaging methods available for shipping purposes, each with its own characteristic features. Mr. Edgerton briefly reviewed some of these classes, indicating the factors to be studied:

Burlap Bags—Buyers should consider weight of burlap, quality of the

goods, Calcutta or Continental woven, construction of the weave, correct size of the bag to contents, possible paper lining, waterproof lining, printing of the bag.

Paper Drums—Quality of paper, kind of pulp used in manufacturing the paper, straight or spiral wound, construction of the bottom and head, attachment to body, possible paraffin lining, sealing of cover, ease of opening the same, and printing of the drums.

Plywood Boxes and Drums—Style of box, use of northern or southern veneer, thickness of same, number of plies, kind of adhesive used in making veneer, kind of lumber to be used and number and size of cleats, nails to be used, possible printing, wiring or strapping. Always keep an eye on the safety features in connection with any type of packaging.

Regular Wooden Boxes—Style of box, kind of wood to be used, thickness of boards, need as to dressing inside or outside, possible extra cleats, delivery in shook form or set up, strapping to be used.

Paper Shipping Boxes

Probably the most popular type of shipping container in use today is the paper shipping box of either solid fibre or corrugated fibre. There are several styles of this type of box, and the first duty of those charged with the selection of a shipping container is to make sure that all kinds, styles, and constructions of containers have been carefully gone over and analyzed.

"After we have theoretically selected our containers, but before we buy them, we should test our selections, and here our supplier steps into the picture to back up his recommendations," the speaker declared. "Many manufacturers of containers have well equipped testing laboratories and I have found

them very willing not only to place the physical facilities at my disposal but also to give me the benefit of the research work accomplished by their technical men. If your supplier does not have any testing equipment he should assist you in having his boxes tested at a commercial laboratory.

"As you develop your box and put it to test, make careful notes of all of its features, because they should be carefully compiled into a definite and complete specification—this specification should be used on all inquiries and orders, unless you contract for your supplies of boxes. In that case I suggest you number your boxes—tie in your box number and your specification number and then send out your bids or orders for such quantities of such box specification numbers as you may require."

Service

Mr. Edgerton concluded his remarks by outlining a new concept of service, going beyond the matter of prompt delivery and adherence to quality standards.

Without absolving the purchasing agent of any responsibility for research and judgment in the selection of product and supplier, he urged vendors to assist the purchasing agent in keeping container costs and shipping costs as low as practicable to the end that the utmost value may be passed along to the consumer. This can be accomplished through fullest use of design and testing laboratories, by elimination of unnecessary variety of sizes, standardization of unit packages, and relieving the buyer's organization of the necessity of carrying excessive inventories. Such factors constitute service in the broader sense. They make for efficiency and help both the industry and its customers.

SAVING SPACE WITH

LIGHT WEIGHT INDEX CARDS



E. A. BANTEL

Purchasing Director
National Bureau of Casualty & Surety Underwriters
New York City

THE study on the purchase of light weight paper, reported in the February issue, proved a most interesting article to me inasmuch as I have been purchasing papers for a long period of years and have been a constant advocate of the lighter weight paper. I have had contacts with a number of paper manufacturers in this country in connection with the production of a ten pound opaque paper, particularly in view of the fact that our organization uses a tremendous amount of paper in the distribution of printed regulations and, very often, is confronted with the necessity of making a shipment of this printed matter, using as much as thirty tons of paper in a shipment.

I do believe, however, there is one other angle that should prove almost of greater interest to purchasing agents than light weight paper as it has many more angles to be considered, and that is the use of light weight index cards. It is obvious that in practically all business offices we do find card records. They are usually prepared in a size 3 x 5, or 4 x 6, or 5 x 8 index cards. In most organizations, if you were to look about, you would probably find many such files in various departments, housing many hundreds of thousands

of such cards. I talk from an insurance company angle and am positive that you will find this condition in insurance companies.

About ten years ago, light weight index cards were not known extensively. There was a particular need for light weight paper or card to be used in conjunction with machine bookkeeping, which was rapidly growing. At that time, a ledger stock was used for the purpose, but some of the progressive card manufacturers produced an index stock that was comparable in thickness and use with the 17 x 22—44 substance ledger. Of course, ledger paper had the stand-up quality but not quite the variety for the job. It was a rag content paper, making it expensive. It was generally produced only in white or buff, occasionally in blue.

About ten years ago, index bristols were produced in white, on a size $20\frac{1}{2} \times 24\frac{3}{4}$ —58 $\frac{1}{2}$ lb. For our general talk on this article, let us compare the $20\frac{1}{2} \times 24\frac{3}{4}$ —58 $\frac{1}{2}$ lb. light weight card with the standard card $20\frac{1}{2} \times 24\frac{3}{4}$ substance 72. Before we look into the merits of a lighter weight card, let us realize that today the mills have recognized the need for this particular type of card and you are able to buy this light weight, or

59 lb. card, in practically all colors and grades. There are several items that should be of interest to purchasing agents. I shall attempt to enumerate those items before going into the actual analysis of their application.

In light weight index, we have the opportunity of doing many economical things in the office. In the first place, you have the efficient handling of that card. It is sufficiently thick to stand upright in the file. It will not sag or curl after years of use. It handles as simply and rapidly as the 72 lb. index. It has super-quality from the standpoint of typing inasmuch as the particular weight stock hugs the cylinder much as a 20 lb. bond paper and it is particularly good in the case of having to make carbon copies.

Saving Space

The most important factor is space saving. One thousand of the 59 lb. cards will require seven inches of space, whereas one thousand of the 72 lb. index will require nine inches of space. This is demonstrated by the photograph at the head of this article. You will find 1,000 of the 59 lb. cards compared with 1,000 of the 72 lb. cards, showing exactly the difference in filing inches. If you were to consider a file having approximately 500,000 cards (I believe most index or card files will have at least that amount of cards) you would probably find that using a regular standard 4 x 6 file consisting of nine drawers of two compartments each, outside measurements 51 x 30 x 15, you would require ten such file cabinets to take care of 550,000 cards of 72 lb. stock, whereas you would require only eight such files to house 572,000 on a 59 lb. basis. The second photograph demonstrates two batteries of files: No. 1, ten cabinets having a housing capacity of 550,000 of the 72 lb. cards; No. 2, eight of the same file cabinets housing 572,000—59 lb. cards. So much for the actual housing and saving of equipment necessary for housing such records.

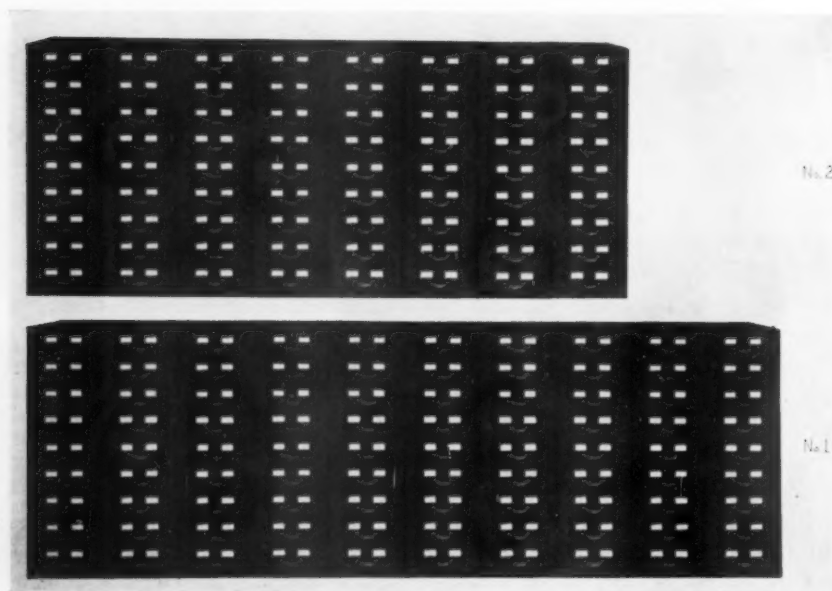
Now let us consider the actual rent space that it saves. For example, the ten files would require approximately 32 sq. ft. of floor space, whereas the eight files would require only 25 sq. ft., and when you consider the fact that this cost must be paid continually year after year for long periods and you have tremendous card records in your office, it becomes quite an item.

Efficient Filing

Further, there is another angle—efficient filing of cards. I am inclined to believe that there are less errors in a card file, or rather in the card drawers of the file, that come within the normal vision of a file clerk than in the cards that are filed at a very low or very high position. The eye-strain and the inaccessibility tend to cause errors, and in order to eliminate the errors, the number of cards assigned to a given clerk must be reduced. In using the light weight cards, we put a greater number of cards within the normal clerk's vision and, therefore, the actual clerical end of the operation of such a file is affected.

It seems to me that the use of the light weight index cards for office records is a very important subject. It has the probability of making a very drastic saving and at the same time improving the efficiency of the records. I know, as purchasing agent, that by substituting 59 lb. stock for 72 lb. stock it has enabled me to turn back many requisitions for additional cabinets. It has also eliminated the necessity of readjusting departments by being able to house many more cards in a given space with the use of light weight stock and it has enabled us to provide records at a minimum cost.

There are very many angles to this particular article, and perhaps this brief statement may provide a rather interesting discussion. I do think that in addition to light weight papers, from the standpoint of economy and from the buying angle, we should include under that heading light weight index cards for consideration.



The two filing stacks at the left afford a graphic illustration of the advantages of using light weight index cards. The 59 lb. cards are used in the upper cabinet group. With 20% less equipment, and requiring 20% less floor space, it houses a record of 572,000 cards, or 4% more than the lower group where 72 lb. cards are used, giving a maximum capacity of 550,000 cards.

SILHOUETTE STUDIES

I: George Albert Renard

AS Executive Secretary-Treasurer of the National Association of Purchasing Agents, George Renard is known to and knows more purchasing agents than any other man in the world. He hails upward of a thousand in speech or writing, by their respective first names or nicknames. Except when occasion, prestige or office demands formality, he dislikes addressing men as "mister." If he continues to be formal after a second or third meeting, it is a safe bet he has found little in common with the person he thus dignifies.

His acquaintance outside the purchasing field is large and diversified. It includes executives in virtually every business vocation, government officials, educators, clergymen and priests, editors of daily newspapers and business journals, economists, social reformers—in fact, the entire gamut of commerce, science and public service. With most of these men, too, the first-name fellowship applies.

He has no nickname. To all his intimates and the majority of his acquaintances he is simply George. That rugged, friendly name fits his personality.

YET most of those who come in more or less close contact with him have only a limited knowledge of his unofficial personality and background. There is an excellent reason for that limitation. On all subjects but one, provided he has an opinion or conviction, George never hesitates at expression. The exception is himself. In his reports, speeches and writing, the personal pronoun is invariably absent. He bestows liberal credit on individuals and committees for service to the association, but never

mentions his own contribution to the achievements for which others are praised. His attitude is not one of mock-modesty or even genuine modesty. He contends simply that he is paid to represent the association and administer its affairs, and that his job is one to which no personal glorification should attach.

So marked is his distaste for self-publicity that he refrained originally from identifying his own forceful contributions to the association's weekly Bulletin, except under the general title "From One P.A. to Another." Now he signs those messages with his initials—G.A.R.—to insure that he evades no personal responsibility for the straight-from-the-shoulder comment directed to the association membership.

Since he never talks about himself, the rank and file in the field of purchasing know little of George Renard's history prior to a day in March, 1928, when he suddenly materialized as secretary of the then somewhat disorganized and disgruntled N.A.P.A. It is a history rich in human interest.

CHRONOLOGICALLY the record begins May 26, 1888, when George was born at East St. Louis, Ill. His boyhood was passed there, and when he completed grade school at the age of twelve or thirteen he decided that his need for formal education was fulfilled. A job followed at a large meat packing plant, and in a couple of years he was in charge of the company's store of records with a staff of boys under him.

A similar job in another plant, but with improved prospects, was offered him and he accepted it. Then it developed that the new

berth would not be ready for a few weeks. Income was important to George, so he returned to his old employer and was given a temporary place in the shop. Tragedy ensued; his right arm was caught in a machine and mangled so terribly that complete amputation was necessary.

Probably because it realized its culpability in assigning a boy to hazardous employment, the company made a quick financial settlement for the physical disablement George had suffered. Out of the hospital, he decided to go on with the schooling he had dropped. He entered high school, completed the course, then matriculated at the University of Illinois to take up the study of law. Graduating in 1911, he entered practice immediately, having passed the Illinois bar examination during the preceding summer vacation.

LIKE most beginning lawyers, George found few clients and fewer retainers. Most of his initial practice comprised defense of actual or alleged criminals, cases obtained mainly by court appointment and without remuneration. On one occasion George and another fledgling attorney were assigned to defend a group of gangsters on serious charges. The jury disagreed, whereupon one of the gangsters reviled the court for appointing "kids" to handle their case. Immediately the judge assigned one of the most prominent members of the bar to defend them at the second trial. This time the jury did not hesitate at a verdict, and the group went to prison for a long term.

Between sordid divorce cases and more sordid criminal trials, George found himself regarding his chosen profession with some repugnance.

He wanted to specialize in the commercial aspects of law, and he was overjoyed when an opportunity arose to join the legal staff of a railroad. But the official with power of appointment went abroad suddenly and with him, at least temporarily, went the cherished job. Undismayed, George located a berth with the city government at St. Louis, where his legal training was put to good use in a special tax division of one of the municipal boards. He settled down in that job to await the return of the vacationing railroad official, but so far as his interest was concerned that event never materialized.

SOMETHING else happened, starting him on the career for which he was destined and fitted. His path crossed that of E. J. Miller, President of the St. Louis Screw and Bolt Manufacturing Company. Mr. Miller offered him a job in that company's plant. It was not exactly a floor-sweeping job, but it ranked little higher. The pay was considerably less than George was drawing in his city berth. The one prospect which Mr. Miller held out was his philosophy never to pay a man more than he was worth—or less.

George took the job, in 1916. He learned the business from the bottom, and his training included service in most departments of the company. He had a fling at selling, but in the end he gravitated into the combined berth of production manager and purchasing agent. Also he became a director of the company in which he had made so humble a start.

Parenthetically, the man who gave him that start is a conspicuous exception to George's rule of informal salutation. Invariably he refers to him as Mr. Miller. Today, as from the beginning of their association, he consults his former chief on many knotty problems, and he regards the forthcoming opinions and judgments as counsel from the highest plane of industry.

In 1923 George joined the Purchasing Agents' Association of St. Louis and, in characteristic fashion,

plunged wholeheartedly into the activities of the organization. In consequence, he became president of the St. Louis Association in 1926. In that official capacity he was brought in close touch with the administration and projects of the National Association of Purchasing Agents.

AT that time, and for the succeeding two years, the N.A.P.A. was evincing symptoms of disruption. Sectional jealousies, weak administration and a secretarial staff at loggerheads with a large part of the membership combined to break down the organization morale. Lewis Jones, then N.A.P.A. president, faced the problem frankly and appointed a committee to reorganize the headquarters staff of the association.

For several months the committee sought earnestly and desperately to find a man with the qualifications and viewpoint to fill the secretarial office. There was no lack of applicants, but in each of them something was lacking.

Then to President Jones one day came a letter from the purchasing agent of a large utility company in St. Louis. The letter suggested that the ideal man for secretary of the N.A.P.A. was George Renard. Whether he could be prevailed upon to accept the post was highly doubtful, but the friendly correspondent urged that he be interviewed. He stressed, too, that he was writing without having informed George of his recommendation.

To Jones and his committee the suggestion appeared to be a desperate gamble. Yet, having failed in all other quarters, they were not inclined to pass up the forlorn chance that George Renard might provide the answer to their prayer. They wired him to come to New York for an interview. Somewhat mystified and perplexed, and probably dominated by curiosity, George answered the summons.

He laughed at the committee when they proceeded to cross-examine him as to his qualifications. He wasn't interested in the job;

his own position and prospects were infinitely brighter. But he was interested in the N.A.P.A. and he sketched his own ideas as to what the committee should establish as requisites for the position they sought to fill. At the end of the interview the committee dropped its patronizing attitude for one of supplication. Each of the trio realized that George was the man they had long been seeking, and collectively they urged him to accept the post. But he laughed again and took the night train back to St. Louis.

THERE he confided the details of his interview and decision to Mr. Miller. Somewhat to his surprise, his chief suggested he had made a mistake in judgment. Here was an opportunity for experience and service to an important branch of management, an opportunity most men would welcome. He—George—was still young; a year or two in the association service would help rather than retard his industrial education. The final decision was up to him, but if he chose to take leave of absence for a year, or even two, the company would spare him and welcome him back at the end of that period.

It was that advice, probably, rather than the continuing appeals of the committee of selection, which finally persuaded George to accept appointment as N.A.P.A. secretary. He came to the job with the firm idea of acting as a stop-gap at a crucial period in the association's career. He expected to serve for a couple of years, at most. Always he has been ready, at a minute's notice, to tender his resignation at the slightest indication that his peak of usefulness had been passed. He has remained—and undoubtedly will remain as long as he chooses—partly because of the charm he finds in his daily stint, but mainly because any attempt to displace him would provoke a membership revolution in the N.A.P.A. For George is an idol and ideal to those he serves.

What he has accomplished in the
(Continued on page 40)

QUANTITY DISCOUNTS

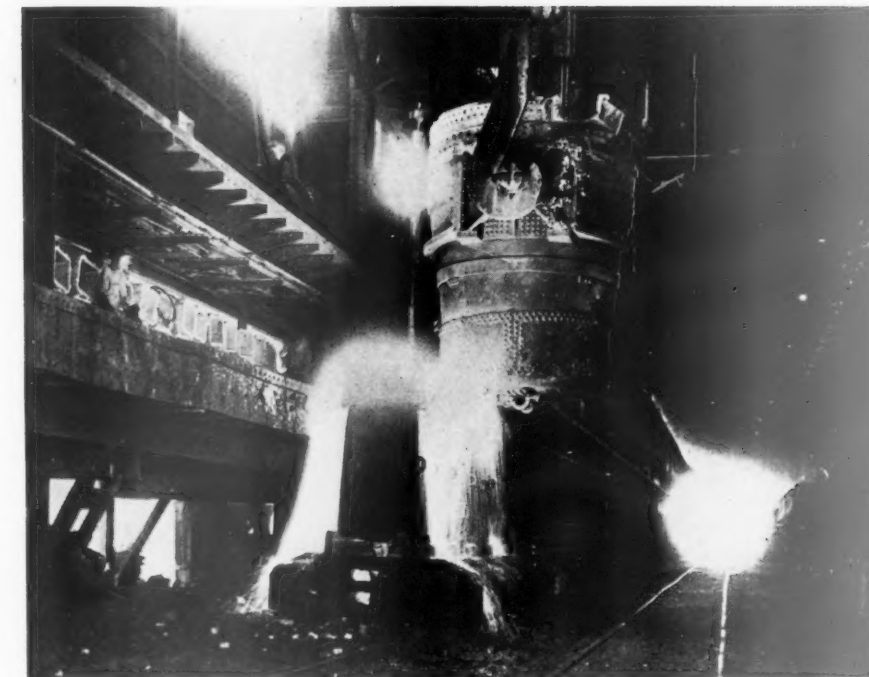
ON STEEL

IN a business community that has grown up without troubling itself overmuch regarding considerations of logical procedure, one of the most logical practices extant is that of the quantity discount. Mass buying is blood brother to mass production and mass distribution in our national industrial philosophy of achieving lower costs through greater volume, and to the extent that each of these aspects of trade—whether purchasing, production, or sales—contributes to the common aim, it is proper that they should share in the resulting advantages.

For the most part, the economies of quantity purchase are definite and measurable.

(1) It makes possible certain savings in manufacturing costs through volume production—not in any simple inverse ratio, for the economies of mass production are subject to the law of diminishing returns, but at least up to the known point of most economical manufacturing quantity, or make order. And not the least important factor in this calculation is the opportunity given to the vendor-manufacturer to practice quantity buying in his turn as he negotiates with primary sources of supply.

(2) It represents a substantial saving in unit handling costs, both physical and clerical. The disproportionate expense of handling small orders is so generally appreciated that it requires no further argument or amplification here. It is an expense that does not stop with the filling of the order, but goes on and is multiplied in the minute detail



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of each accounting record, in credits and collections. It finds striking exemplification in the commonly recognized distinction between wholesaler and retailer. For all the discussion about the jobber's functional position in the distribution process resolves itself basically to the fact that he buys economically in large quantities and assumes the specialized responsibility of high-cost small-quantity redistribution.

(3) It effects savings in cost of transportation and delivery, up to the point where the unit shipment is a full cargo, carload, or truckload consigned to a single destination. This factor varies considerably according to the type of material and the distance it has to be carried. There is probably little real transportation economy to be achieved by quantities beyond the single complete unit, and with the development of highway transportation this unit has been reduced, in many cases, to the truckload. However, the cost differential between full load and split shipments is a substantial figure.

(4) Further, when the economical purchase quantity, according to

these standards, is in excess of immediate requirements, the quantity discount is a recognition of, and an attempt to share, the cost of carrying the material from time of manufacture to time of use, borne in this case by the purchaser.

In addition to these clear and economically justifiable reasons for the allowance on the basis of various costs, there are some less tangible and some less logical corollaries which are nevertheless highly regarded from the vendor's viewpoint. Among these applications of the quantity discount are:

(5) Its use as a reward or an inducement to the customer for concentrating his purchases with a single source of supply.

(6) Its use as a basis of customer classification according to the capacity to buy.

(7) Its use as a measure of the relative value to the vendor of a large customer as compared to a smaller customer.

The importance of these latter considerations in the formulation of sales policies is indicated by the fact that they frequently dictate a quantity discount plan that runs

directly counter to the more logical lines of reasoning listed in (1) to (4) above. Such, for example, is the willingness to extend quantity discounts to chain outlets involving many separate small deliveries to different destinations, violating every principle of (2), (3) and (4) except the single credit risk; and, conversely, the opposition to be found in several industries to practices like cooperative buying or the pooling of carload orders through a broker. Such is the regulation observed in some lines of builders' and contractors' supplies, requiring that the quantity order be restricted (for discount purposes) to items actually specified and used for one particular job. And such is the cumulative discount plan, retroactively granted according to total quantities used over a period of time.

Competitive Factors

The whole matter has been—and still is—a sharp issue cutting across various fields of trade competition: big company vs. little company, chain store vs. independent, mail order vs. local distributor, jobbing vs. direct selling. That issue has not yet been resolved, and one of the principal reasons is that we haven't been able to make up our collective mind which, as a matter of national policy, is worse—the condition or the cure. For aside from curbing the most flagrant and predatory abuses of great purchasing power, the only apparent approach to the problem has been to deprive the large buyer of his natural economic advantage. There is no way of arbitrarily investing a concern with this advantage if it hasn't been earned; price equalization must always be a process of favoring the least economic units, and that is a dangerous policy, subversive of industrial progress and resulting in a net reduction of our total national purchasing power.

Code regulations are of course obsolete today, and of merely academic interest. They do, however, furnish us with a record that is a fair cross section of trade thought and objectives. In the approved

codes there were to be found quantity discount clauses widely divergent in nature: some that absolutely prohibited any allowance for volume; others that set fixed maximum discounts for specified quantities; others that limited the application of discounts as noted in the second preceding paragraph. Some left the question wide open, still subject to abuse on the part of either buyer or seller. In between there were a few very reasonable and temperate statements of policy, such as the clause embodied in a number of food industry codes, providing that "No member of the industry shall offer or make a quantity price unless it is based upon and reasonably measured by a substantial difference in the quantity sold and delivered."

That is past history now. But the question has again assumed immediate importance within recent weeks in connection with the Robinson Bill now pending before Congress, and more particularly in the fact that steel quotations for the second quarter have embodied the quantity discount plan, with a minimum requirement of 150 tons to earn the major concession from the basic price.

Clear-Cut Policy

Heretofore, most quantity discounts on steel have been a matter of individual and confidential negotiation, and they have frequently been achieved by some means such as waiving the extras that would nominally apply. Handled in this way, the concessions really amounted to price cuts and definitely tended to weaken the whole price structure. This was clearly apparent when, a few months ago, the discounts accorded to large users in the automobile field became generally known and similar consideration was quite logically demanded by purchasers of comparable quantities in other fields. A market that otherwise had many elements of strength at the time was seriously undermined, as in the case of any market when the nominal quotations are not observed. For without a consistent

and clean-cut declaration of policy on the part of the industry, the lower price would be, if not actually the going market, at least something for buyers to shoot at.

Coming out with the new quantity policy has both strengthened and stabilized the market, at the same time that it offers a more equitable recognition of the buyer's position—small, intermediate, or large. It is a realistic approach to the price situation, reflecting the prevalent condition and setting a pattern that, in broad outline, is logical and workable even though some further changes in detail may be required. Selling policy has been adjusted to the facts of the situation.

Buying Practice

It now remains to be seen how buying policy will be adjusted to the new program. The buyer's responsibility is to purchase most advantageously under the prevailing regulations and customs of the trade. The game must be played according to the rules. With this price policy setting up a specific rela-



Says Hi-Pressure Pete:

One way to cut down unnecessary time on sales interviews would be to put them on a toll basis. But some salesmen would still reverse the charges.

tionship between quantity and quotation, defining the volume requirements for procuring the most favorable terms of sale, the attainment of that volume becomes a primary objective in purchasing.

There is of course the possibility of growing up to larger requirements, but that is a slow and uncertain process. For the buyer whose normal requirements fall below the stated volume, a more immediate and natural recourse would be to some form of cooperative buying. This plan has been widely used, and is considered entirely legitimate in a number of fields. Independent retailers have met chain competition by the formation of buying groups. Agricultural producers have long made it a practice to purchase fertilizers and other supplies on a cooperative basis, this function being generally coupled with a more complete cooperative program that embraces marketing as well. Referring again to the codes as an index of industrial thought, a general governing order specifically recognized such regularly organized cooperatives as entitled to the benefits of quantity purchase so long as the cooperative itself was a service bureau and not a profit-seeking venture.

Group Buying?

This may or may not be the answer in steel buying. Early comment in the steel journals suggests that such an interpretation may be opposed by producers. It is pointed out that certain factors will militate against the practice—particularly the fact that much steel is now made to special specification, and the inconvenience of redistribution if combination shipments are made to a single point. These objections are real, but neither of them is insurmountable from the purchasing angle. Specifications are not inflexible, and certain basic standards are generally accepted in industries like automotive manufacturing. As to redistribution costs, this factor would have to be balanced against quantity differentials to determine



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its practicability. That the whole situation will be carefully watched is indicated by the further commentary that such pooled orders could readily be detected or identified by producers. Which is doubtless true. It would be unfortunate indeed if the new plan should be inaugurated in an atmosphere of subterfuge and evasion.

In the absence of actual experience with the plan, predictions as to its efficacy from either the sales or purchasing angle are likely to prove premature. In general, the new set-up appears to be sound in principle and realistic in attitude—a step in the right direction. There is much precedent in other fields to support this view.

If it works out greatly to the disadvantage of the smaller user, we may expect some strenuous concerted opposition comparable to the legislative pressure brought to bear by independent merchants who find it difficult to cope with the buying power of their larger competitors. The fact that steel marketing practice is currently under critical official scrutiny once more, might add some psychological force to the plaint of unjust discrimination, although the two subjects of quantity discount and basing point are quite separate. But the industry

itself, which has over many years found one of its chief sources of strength in broad and diversified outlets for its products, would be just as loath as consumers to see any harmful discrimination result.

Mutual Advantage

If it can be met, legitimately, by some adjustment of purchasing technique, we may expect some anticipation of requirements by purchasers who are close to the borderline of the stated volume, and some forms of pool buying—possibly consumer warehouse stocks maintained by two or more users having common requirements. In either event, somewhat larger steel inventories in the hands of buyers would result, and this in itself would contribute to market stability.

The project is being watched with great interest by everyone concerned. In so far as it tends to share economies of production and distribution due to quantity purchase, it should be advantageous both as marketing practice and purchasing practice. In so far as it tends to clarify the actual price structure and remove the uncertain factors of individual price pressure and negotiation, it should both strengthen and stabilize the position of the industry.

F. O. B.

(Filosofy of Buying)

ALL hail to the virtue of frankness! Down in Richmond, the city is currently pondering the Andrews report, recommending certain changes in municipal administration—specifically the establishment of a personnel department and a division of purchasing. Remarks Columnist Roy C. Flanagan in the *Richmond News Leader*, March 19: "Both camps . . . agree that while these proposals may, as claimed, save some money in one way, they may lose both money and votes in another. . . . It is admitted that a personnel expert and a trained purchasing agent possibly could do better than can a mayor chosen by the electorate. However. . . . The chief objection from the politically-minded people to a centralized purchasing bureau is that it may force the city to spend much of its ten million a year on direct purchases from out-of-state firms. Any strict policy requires that supplies be bought at the lowest possible delivery price, and if the plan were adopted the city government would, of necessity, have to do what Richmond wholesalers and retailers now do—buy and arrange orderly delivery of all kinds of supplies, little and big, from manufacturers in all parts of the country."

P.A.'s Mother Goose

Cheer up, Boy Blue,
Start tooting your horn
For trade is improving
As sure as you're born.
Some will buy quality,
Some must buy cheap,
But none from the vendor
Who's still fast asleep.

IN an article appearing elsewhere in this issue, Fred Space describes a river as following "a clearly defined course, and between definite banks" . . . which will doubtless be the occasion of some raucous guffaws in his direction by his colleagues in flood-devastated New England and points west and south. In justice to Mr. Space it should be noted that his article is dated February 24, a full three weeks before the rivers decided to belie his description. And furthermore, like a canny P.A., he has hedged his remarks in this same article by the observation that "even a purchasing agent can occasionally be wrong." We let the comparison stand because it did, and does, very effectively express the author's point. After Space, the deluge.

THE Standard Vehicle Company of Lawrenceburg, Indiana, reports a steadily increasing demand for buggies since 1932. Nine hundred such vehicles were sold last year, representing a sales volume of about \$75,000. However, in view of recent slurs upon the "horse and buggy days" there is some question whether this is actually a record of progress.

But when sales of red ink fall off, as reported by a Cambridge, Mass., manufacturer, everyone is agreed as to the hopeful significance of the statistic.

THE other morning, while waiting for a green light so that we could get across the Avenue, we noticed a light truck bearing the sign: "This is one of L____'s delivery trucks. It is operated by a Competent and Courteous driver, who uses Care and Common-sense." And we couldn't help thinking what a splendid slogan that would make, with slight paraphrase, to hang outside a purchasing office. Traditionally, there ought to be "Seven C's," but these four—Competence, Courtesy, Care and Common-sense—are pretty good for a beginning.

Il Deuce (to use the Americanized spelling) made the front page headlines last month by nationalizing a big slice of Italian industry. Which is one way of removing constitutional scruples about control of production and price. But we're betting two lire to one that there'll be no undistributed surplus to tax.

It may be true, says the Old Line Buyer, that salesmanship is the most highly developed of the commercial arts, but I have met a few practitioners of the art who never got beyond the larval stage.

WITH one group of N.A.P.A. committeemen insisting that the convention program is hot stuff, and Joe Pries and his local boys insisting with equal vehemence that New Orleans temperatures are not nearly as hot as they are generally reported, it behooves every P.A. to go down there, May 25-28, and find out for himself. We have a hunch that both are right.



Electric furnace used in production of aluminum oxide abrasive

What the P. A. Should Know About ABRASIVE GRAIN

WALLACE T. MONTAGUE

Norton Company
Worcester, Mass.

THE manufacture, inspection, and application of abrasive grain to industrial uses has many technical aspects, but the purpose of this article is only to give the buyer such information as will aid him in purchasing abrasives in grain form intelligently. No attempt will be made to discuss the purchase of grinding wheels or other bonded abrasive products or abrasive coated goods.

There are two main families of abrasives commonly used in industry today. These are the aluminum oxide group and silicon carbide. The so-called aluminous abrasives consist of crystalline fused alumina such as emery and corundum, where nature did the fusing when the earth

was being formed, and also include the much more generally used artificial aluminum oxide abrasives where the fusing takes place in a modern electric furnace of the arc type.

Of the three types of aluminum oxide abrasives referred to in the preceding paragraph, natural emery has the lowest content of aluminum oxide which in the fused crystalline state is the cutting element in this family of abrasives. Generally speaking, the emery used in industry today contains an average of 65% aluminum oxide, the remainder being a matrix of iron oxide which has little or no abrasive qualities. American emery is now of such low grade that it has little commercial value as an abrasive and so most of

the emery used here is imported from Turkey and Greece. Turkish emery is, generally speaking, used for certain special polishing operations on cutlery and glass, whereas Naxos (Grecian) emery is preferred for the manufacture of the very few emery wheels still in use.

Corundum occurs in nature but is usually associated with enough impurities to render it much less efficient than the artificially fused aluminum oxide abrasives now in general use. Domestic corundum of suitable quality not being available, such as is now being used comes mostly from South Africa. It has an average content of about 80% aluminum oxide and is used in certain types of special purpose grinding wheels and

in grain form for the surfacing of glass lenses.

Artificial aluminum oxide is made in the electric arc type furnace and has chemical and physical characteristics which make it superior to emery and corundum for most uses. The brown varieties will average from 93 to 95% of aluminum oxide but the white variety will average to contain 98% of aluminum oxide.

Carbide of silicon abrasive is purely synthetic. It is manufactured in a resistance type of electric furnace from high-grade silica sand and carbon in the form of finely ground coke. These common materials when mixed with certain other ingredients and subjected to the tremendously high temperatures of the resistance furnace react with one another to form abrasive crystals which have a somewhat different field of application than those of aluminum oxide. Perhaps its largest use in grain form is in the stone, ceramic, and glass industries.

As the purchasing agent is usually more concerned with the buying of artificial aluminum oxide abrasives for use with an adhesive, this article will deal primarily with this phase of the abrasive business.

A Cutting Tool

What is the function of a polishing grain? Whether bonded in a solid grinding wheel or imbedded in the surface of a flexible polishing wheel, the small grains of abrasive are tiny cutting tools. There are often thousands of abrasive grains on each square inch of polishing wheel so that when this polishing wheel is made to revolve at two or three thousand revolutions per minute, literally millions of minute chips are removed in the short space of one minute. A grain of abrasive, no matter how small, is an individual cutting tool, and grinding and polishing are successful commercial operations only because of the multiplicity of tools in action at a given instant and the speed with which they are kept in action.

Now then—when we mention cutting tools, the purchasing agent

is quite at home. He buys all kinds of steel, stellite or cemented carbide cutting tools in the form of lathe and planer tools, milling cutters, drills and broaches. He knows the need for buying brands which will meet rigid specifications in the matter of hardness, toughness or temper, uniformity and reliability. Inasmuch as abrasive grains are also cutting tools though very small ones, it should be clear to the buyer that he is vitally interested in their hardness, toughness, sharpness, purity, and uniformity. That is where the technology of abrasives comes in and where care in the selection of suitable raw materials combined with skill in their compounding results in cutting tools of high quality and dependability.

Abrasive grains of cheap price may look as good to the naked eye as grains of higher quality, but the former may fail in service because some phases of their compounding and manufacture may have been slighted in an attempt to cut cost. The quality and dependability of cutting tools of abrasive grain are all the more important when it is realized that the buyer has to expend labor in preparing them for use on polishing and buffing wheels. This labor will go for naught if the cutting tools themselves do not measure up to the requirements of the job.

It therefore behooves the buyer of aluminum oxide abrasive grain to have a knowledge of or find out about the following chemical and physical properties of this product.

Hardness

For the purposes of this discussion, "hardness" may be thought of as scratch hardness—or the ability of the abrasive grain to penetrate the material being ground or polished. Most artificial aluminous abrasives on the domestic market today have this quality to a uniformly high degree.

Toughness

Strength or toughness of abrasive grain is a function of its heat-treatment, shape and crystal size.

Toughness is that quality, therefore, which enables a grain of abrasive to stand up under the strain of the cutting operation after its hardness has enabled it to penetrate. Obviously, the grain that lacks sufficient strength or toughness for the operation at hand wastes the buyer's money for it wears away excessively and hence requires more abrasive to do the job. Competent manufacturers of quality abrasives understand the importance of imparting the quality of toughness in varying degrees to suit the requirements.

Sharpness

This quality is important in determining rate of cut. It is brought about by care in crushing the ore so that the grain will have angularity and sharp cutting edges. Taken in conjunction with hardness and toughness, it is the primary insurance of cutting efficiency. This physical property of abrasive grain is not thoroughly understood and controlled by all makers and hence the buyer should exercise care in checking on this item.

Purity

This is a function of care in the selection of raw materials, skillful blending, careful furnacing and thoroughness in cleaning the processed grain. Abrasive producers with most competent research staffs are likely to hold this property under closest control.

Uniformity

This is brought about by careful manufacture and effective controls at all stages of the processing. This quality can best be checked by observing the results of repeated experience with the product. Some producers have a better reputation for uniformity than others.

The commercial importance of uniformity of grain size is one of the greatest concerns of the purchasing agent. It is here that much trouble can be caused in a factory by oversize grains which scratch and mar the finish or even by undersize grains which fail to do their share of the work.

Here is where the experience, skill and care of the grain producer should count for a great deal in the eyes of the purchasing agent. Size uniformity depends upon accurate mechanical sieving machines and upon following rigid specifications for the inspection of screen cloth. Thus size uniformity is brought about by controlling the quality of all screens used and every step in the screening process. The most up-to-date grain producers have developed control tests involving the use of master standard grain samples and master standard sieves. They have also developed sieving machines which largely eliminate the human element.

Surface Adhesion and Bonding Strength

One of the most important factors in the success or failure of a polishing abrasive is its contact strength or surface adhesion to the glue which in turn binds the abrasive particles to the face of a polishing wheel. Long ago it was demonstrated that high capillarity of the abrasive grain surface was essential. Capillarity is the rate of wetting of the abrasive grains by the glue.

The prime reason for wanting abrasive grain of high capillarity is to insure the ability to produce strong wheel heads. Strong wheel heads are necessary to withstand the severe strain of polishing tough metals. Grain of highest capillarity is usually surface-etched as well as entirely freed from oil and grease. There are different ways of producing capillarity on abrasive grain and the use to which the grain is to be put is usually the determining factor.

Capillarity and cleanliness of grain should be preserved right up to the time the grain goes into service and hence the shipping container for the grain should be as nearly air-tight as possible.

Carbide of silicon is seldom used with an adhesive. It finds its way into the stone trade, for use on sur-

facing machines in producing plane surfaces. Probably its great single use is in the granite industry where it is used loose with water. Hence the buyer must be on the lookout for silicon carbide grain of uniform hardness, sharpness, and carefully controlled sizing.

Sizes Available

The following sizes are usually available in aluminum oxide abrasives:

Screened Sizes: No. 4, 6, 8, 10, 12, 14, 16, 20, 24, 30, 36, 46, 54, 60, 70, 80, 90, 100, 120, 150, 180, 220, 240.

Unclassified Flours: F, 2F, 3F, 4F, XF.

Classified Flours: No. 280, 320, 400, 500, 600.

In carbide of silicon, the following sizes are usually available:

Screened Sizes: No. 8, 10, 12, 14, 16, 20, 24, 30, 36, 46, 60, 70, 80, 90, 100, 120, 150, 180, 220, 240.

Unclassified Flours: F, 2F, 3F, 4F, XF.

Classified Flours: No. 280, 320, 400, 500, 600.

The average purchasing agent has far too much to engage his time without becoming well versed in the practical application of all the supplies he buys. The use of abrasive grain involves many technical con-

siderations which are but superficially treated in this article. However, if a new polishing job comes up and requires the purchase of abrasive grain, the buyer should be thoroughly informed on the following points:

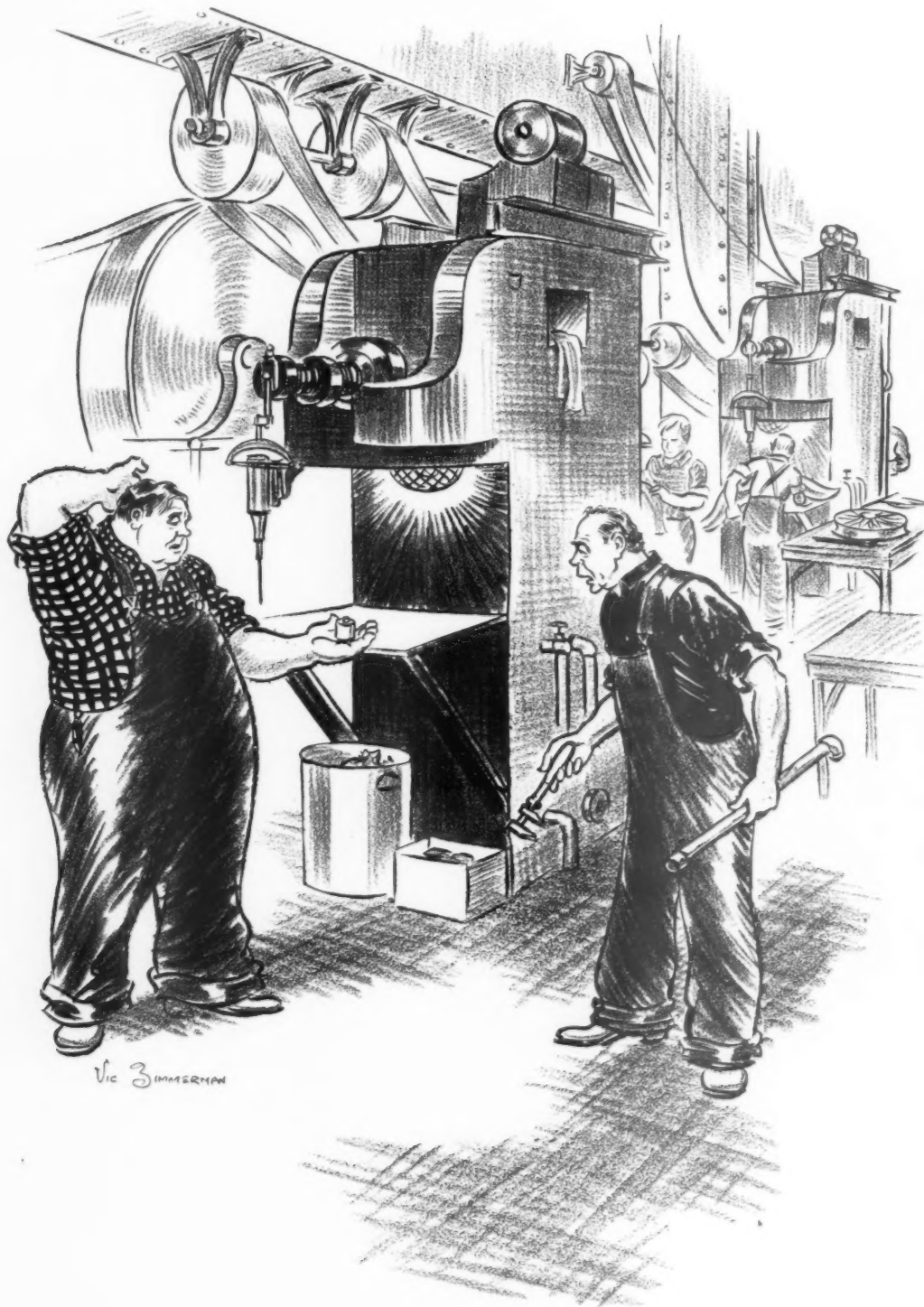
1. The material to be polished.
2. The condition of the surface and the amount of stock to be removed.
3. The operating speed of the polishing wheels.
4. The size and type of polishing wheel to be used, with special reference to its resiliency contact pressure.
5. Finish desired.

This information and as much more as can be obtained should be sent to the abrasive grain producer or, better still, he should be asked to send an expert service man to look over the problem. No definite procedure can be safely outlined without a complete knowledge of the details of a specific polishing operation.

A vast amount of information has been developed by research and collected by field service engineers. This is available to the buyer for the asking. And so when in doubt on a problem involving the use of abrasive grain, send for a competent service man or, if the problem warrants it, an abrasive engineer.



Photo at right: Abrasive grain is checked for its capillarity by means of apparatus of this type.



"It's a sample of some new kind of lubricating oil. The P. A. wants a complete report on how it stands up under factory conditions."

THIS JOB OF BUYING

A haphazard attitude does not pay. The best results are achieved only when the buyer carefully elects his calling and gives it the best that is in him, when management chooses its man with equal care and recognizes his part in working out the general plan.

FRED G. SPACE

Purchasing Agent
Seymour Manufacturing Co.
Seymour, Conn.

ONE of the most hopeful and encouraging signs of this present time is the natural desire evidenced on the part of busy men to meet in company with their fellows to consider ways and means of advancing their profession, yes more than that, to become better informed in many ways to the end that they may render a larger measure of service to society. We see its expression in the large number of civic and service clubs, some of which have literally come to occupy a place in the sun, and that during the last few years. Professional societies are strong and vigorous in their field and the Purchasing Agents' Association is one of them. The distractions of the present day may have played havoc with lodge membership, and automobiles and golf may have had some effect on church attendance, but in the realm of organizations such as our own there is every reason for hope and encouragement.

What do you expect from your Association? That question has been raised times without number. It is not my purpose to review a number of things with which you are already familiar, but the fact remains that your officers and your program committees wish that you would tell them. I know what I want, and have expressed my thoughts in this regard many times. First, I want the opportunity to become acquainted with others in my profession. I want the privilege of sitting down to a banquet table where purchasing problems are served, and to partake thereof. Finally, I want to lay myself open to that refreshing stream of ideas, viewpoints and activities as they are expressed by my contemporaries, to the end that I may not become stag-

nant in my chosen field of endeavor. There are other reasons, and you may extend this list as you choose. My thought is to stimulate your thinking so that you will do just that.

Sometimes I think that we purchasing agents are adept at wearing false faces. We are not supposed to reveal any particular emotions. We must let the salesman create his own conversation and hold our replies to the Biblical injunction: Yea and Nay. We may be keenly enthusiastic on such matters as golf or fishing, yet we must not be led astray, for we are supposed to be busy men. If we would see fifteen or twenty salesmen a day, and issue thirty or forty orders, and dictate as many letters; if we are to arbitrate in the matter of materials which do not seem to perform properly, and to convince the sales manager that the reason a piece of business was lost was not because we quoted too high a material price to the estimating department; and if, withal, we are to keep one ear to the telephone and a smile on our reputedly grim visages—well, perhaps we must wear a mask.

Masks may be worn by the sav-

ages in the African jungles or in the theater to emphasize tragedy or comedy, or on Hallowe'en for the purposes of masquerade, but honestly, now, how about the masks which we wear? Some are worn in self-defense, but mostly, I dare say, they are masks that we unconsciously acquire with the passing of the years. If I were expressing these sentiments before a salesmen's group I would probably conclude by answering, "It's a secret, men, and worth a thousand dollars."

Some time ago I overheard a salesman, in speaking of a certain buyer, say this: "He never fails to irritate me because he is so cocksure. To differ with him in any way is to precipitate an argument." If that buyer would rub elbows with more of the men in his profession, he might find that some of his cocksureness would not fare so well when thrown into the arena of open discussion.

Let's be independent in our thinking and have opinions of our own, but let's not be too cocksure, for even purchasing agents can occasionally be wrong.

Middle of the road thinking may not be very impressive—politically, economically, or otherwise—but it's better than blind partisanship. One who is too cocksure is in a rut, whether he recognizes it or not, and someone has pointed out that the chief difference between a rut and a grave is a matter of dimensions. There is a give and a take to most everything, and purchasing is not exempt from that rule. Let's be a little more open minded in our approach to the problems of our profession—in that manner is honesty of purpose best revealed.

What is management's attitude toward the purchasing department? Our answer to that would in all probability be a statement of our own experience and therefore it may or may not be typical. Fortunately, in the twenty odd years that I have been buying I can honestly say that no concern for whom I have worked has impressed me with the thought that my department was one of little importance. Perhaps my whole being was so steeped in the notion that it *was* important that at times I may in effect have been wearing colored glasses. May I emphasize, however, that the purchasing department is you and I and those who assist us. We may deal with materials and prices, but our contacts are with people. No other department has the breadth of contacts that we do. Our position in that regard is unique. Generally speaking, it is within our power to make our department one that will command the respect, the consideration, and the attention from management that will ultimately bring us to the council table.

Following the usual line of reasoning we would no doubt all agree that management looks to its purchasing department for results. That is a little word with a big meaning. Results may be good or bad. The efficiency of our department may be measured by results. What are the results, specifically, which management would look for? First, the purchase of the most suitable materials that the market offers in the manufacture of our company's products or incident thereto, such as supplies. Again, it expects the delivery of those materials on a basis that will at no time retard production. And finally, it looks to the purchasing department for profit—a purchase price that will enable the manufacturer at all times to maintain a materials cost level on as favorable a price basis as that of his most exacting competitor. As I see it, these are the fundamental reasons for the existence of the present day centralized purchasing department in industry.

In the old days, most buyers just

drifted into their positions. Today a young man who considers entering the purchasing field may take a college course in purchasing, or, if he cannot approach it in that way, he will find at his command books and magazines and a wealth of special articles to which he may turn for information.

I sometimes wonder, however, with what care management selects its buyers? Let's retrace our steps just a bit. This I believe: He succeeds best who works diligently at those things he most enjoys. This does not imply weakness or following the easiest way. It does mean that heritage and environment and the task that offers the greatest challenge, all do their part in shaping our course to its happiest destiny. There is such a thing as natural aptitude, and fortunate is the young man who recognizes that aptitude within himself and hews to the line. Twice fortunate is the business that is alert for such evidences among its employees. Surely it will reduce labor turnover and make for greater loyalty and increased efficiency.

Judging from occasional things that we read and hear, there must be some misfits in the purchasing profession. Indeed, would it not be strange if there were not? It is probable that those same buyers at least partially recognize this fact, which accounts for the alacrity with which they step from the buyer's desk to the salesman's portfolio or into some other field. Incidentally, Charles Ford, that versatile writer on purchasing subjects, ridicules those serious minded persons who speak of purchasing as a profession. He insists that it is a state of mind, and perhaps he is more nearly right than it might at first appear. But since with management rests the privilege and the responsibility of hiring and firing, does not management share somewhat in the responsibility for such measure of employment mortality as there may be? Was the purchasing agent selected for his position because of his special training or experience or a natural aptitude for his work, or was the position open to

him because he had served efficiently as a clerk? Was he selected with the same care as was evidenced in the appointment of other department heads?

This is mentioned not in the spirit of destructive criticism, but to point out a condition which does exist, though fortunately to a diminishing degree. The past decade has witnessed a vast change in the status of the purchasing agent. Today when a buyer steps out, he usually steps up and not down; and with increasing frequency the advance is with his own company. To the credit of the buyer let it be said that he and his fellows are largely responsible for the present status of his profession, for within the ranks has come the vision. Management today recognizes that the purchasing agent should be equipped to meet without odds the best of salesmen that it might be his privilege to entertain. It is to the disadvantage of the buyer that he must spread his knowledge of materials and markets over a thousand and one items. In his efforts to become better informed there is a tendency to spread himself out too thin. It would be better if he would major in fewer things. He would soon be recognized as an authority and he would be a bigger man as a result. I am reminded as an analogy of the difference between a swamp and a river. The former spreads itself over an indefinite area and becomes dark and stagnant. The latter follows a clearly defined course and between definite banks. It is clear and refreshing and progressive.

Let us be proud of our tasks and put the very best that there is in us into our chosen field of endeavor. If we do that, we will never become so old that we have stopped growing. It is such a purpose that will build character and reputation. And character and reputation, as someone has well said, are not the outcome of chance—they are earned through fidelity to principle.

Abstract of an address before the Rhode Island Purchasing Agents' Association, Providence, February 24, 1936.

HOW NOT TO PURCHASE

Once again mismanagement tries to shift the blame for its own shortcomings and complete lack of understanding, with the much abused purchasing agent as the goat, but succeeds only in presenting a highly ludicrous exhibition of warped reasoning

UNDER the caption "Pin-Straightening Purchasing Agents," the February issue of *American Business* delivers itself of a scathing belittlement of the buying fraternity, attributed this time to "a prominent Atlanta company." The generalization implicit in the title is based on the experience of one buyer, whose job it was to buy \$35,000 worth of office supplies, printing and stationery, per year. On the other company purchases, amounting to about \$105,000 per year, his responsibility and authority were limited to the routine issue of requisitions as directed, calling for standard items selected and "practically purchased" by the company's superior officers. For this far from onerous assignment, he was very liberally supplied with an assistant, a clerk, a stenographer, a stock man, offices and warerooms, at an annual cost of \$13,800. The management discovered that this arrangement was excessively expensive. So they abolished the whole "purchasing department" and proceeded to issue a self-righteous report to their suppliers, turning over the purchasing function to an un-price-minded Third Vice President who forthwith announced his intention of placing the whole business with one responsible local concern on an annual contract, allowing the vendor company $16\frac{2}{3}$ to 20% profit. The whole story is passed along by the jubilant supplier.

The utter inanity of this display of so-called management, which would be more appropriately reported in the pages of *True Confessions* than in a serious business journal, is deserving of attention solely because the editor has seen fit to append a series of questions regarding the significance of the move:

"Is this company correct in its attitude that the purchasing department should be abolished?

"Can it be possible that the so-called 'savings' made by a hard-boiled, price-conscious purchasing agent are not savings at all, but a liability and an added expense?

"Would the average, small and medium-sized company be better off if it completely revolutionized its buying methods and abolished the purchasing agent entirely?"

If these questions are asked in good faith, and are not merely rhetorical, it is reasonable that they should be answered by one with some experience and knowl-

edge of purchasing. At least one such answer has appeared, a very literate and intelligent discussion by P. A. Joseph Nicholson, of the City of Milwaukee, which comes inevitably to the conclusion that this article is not talking about an actual purchasing agent at all—for the poor subject of this diatribe is more to be pitied than censured, being up against an impossible situation in the first place, and equipped with neither the vision, the ethics, the personality, the authority, nor the technique for the job. He is a viciously comic stage purchasing agent, no more typical of the real article than the stage Irishman with a clay pipe, a fringe of orange whiskers, and the habit of starting each sentence with "Begorra" is typical of his race. The unfortunate part of the whole affair is that the term "purchasing agent" should be dragged into the picture at all.

Cost of Purchasing

The proper cost of purchasing cannot be stated categorically with any degree of accuracy or finality. Nor can any such figure be isolated as a true measure of purchasing efficiency. However, there will be no argument on the point that 39.4%, as in the case under discussion, is unconscionably high.

What should it be? In scores of typical examples of well-ordered purchasing departments it ranges from $\frac{1}{2}$ of 1% to $1\frac{1}{2}$ % of the volume of purchases. Let's be liberal and say that 2% would represent a satisfactory performance. Then, on the basis of \$35,000 annual requirements, we have here a job that merits the attention of a \$13.50 per week executive, unassisted. Or since this would be patently ridiculous, it might be better to say that it merits one day per week on the part of a reasonably competent and responsible executive. Small wonder that this buyer had the time on his hands to "listen to salesmen and accompany them on recreation trips," and that his efforts were "frantic" in order to make a showing and justify his job. "No matter what he saved his company. . . he could not begin to pay for himself." Clear waste, but whose the fault?

Specialization and organization are splendid principles in industrial management, but like all other splendid principles they can be pushed to ridiculous ex-

tremes. To be effective they must be adapted to the circumstances of the particular case and applied with judgment and common sense. Over-organization is just as expensive as under-organization, and the waste is more apparent because it is expressed in actual expenditures above the norm rather than in potential but unrealized savings. The net results are probably not far apart.

The prominent company in Atlanta apparently has a flair for over-organization. For in addition to setting up a full-fledged department with five full-time employees to purchase \$35,000 worth of stationery items a year, they manage to support—on a business that can be roughly gauged by the total purchase volume of about \$12,000 per month—no less than three vice presidents. There may be more, but from the general tenor of the article we may assume that purchasing was relegated to the lowest ranking member of the hierarchy.

But they are not even consistent in this organization principle, for although they ostensibly believe in the centralization of the purchasing function, they prescribe—under both the old and the new plan—that more than 75% of the purchasing shall be done by officials whose principal responsibility is in some other field.

Now this is not a typical case. It happens that there are actual studies upon the subject, studies that indicate both the wide variations in practice and the prevailing plans of meeting various situations. Only six months ago, Professor Erwin H. Schell, who heads the department of Business Management and Administration at Massachusetts Institute of Technology, analyzed the purchasing departments in seventy-seven companies—large, medium and small. He found that in the representative large companies, 63% of purchasing executives devoted themselves exclusively to buying; 15% took partial responsibility for receiving incoming shipments, inspection and test of purchased materials, control of stores, material and inventory control, traffic routing, rates and charges, and checking of invoices; 22% had full control of these related functions. But in the small companies the percentages were almost exactly reversed, with only 20% making a full-time job of the actual buying, 16% in the intermediate zone, and 64% taking full responsibility for all these related duties. On such a basis, handling the full \$140,000 worth of buying plus these complementary functions, our unhappy friend in Atlanta would perhaps have had an even chance to "pay for himself" and might even have done a little vice-presidential on the side to the benefit of all concerned.

The New Plan

The revised organization plan swings to the other extreme. Instead of spending a day a week on the buying, the new incumbent proposes to spend one day a year and settle it all on an annual contract with one supplier. With characteristic liberality he proposes to

allow the supplier a profit of $16\frac{2}{3}\%$ to 20%, which is a pretty handsome margin if the word "profit" means what the Department of Internal Revenue and any thoughtful management believe it to mean.

This margin is smugly justified as representing an actual saving to the buyer company. A saving on what basis? Why, in comparison with the hopelessly extravagant costs hitherto prevailing, of course, but hardly on any reasonable measure of efficiency.

But there's another consideration—our old friend reciprocity, here referred to as "a cold-blooded business proposition with us." The new Third Vice President in Charge of Purchases is quoted: "We want to be in a position to say to salesmen, 'We buy all our supplies from you on a yearly signed contract.'" Ah, Mr. V. P., you can say that to only one of the prospective suppliers, and there are eleven who have previously shared the business. Is this a sound policy for bringing back the lost good will?

Questionnaire

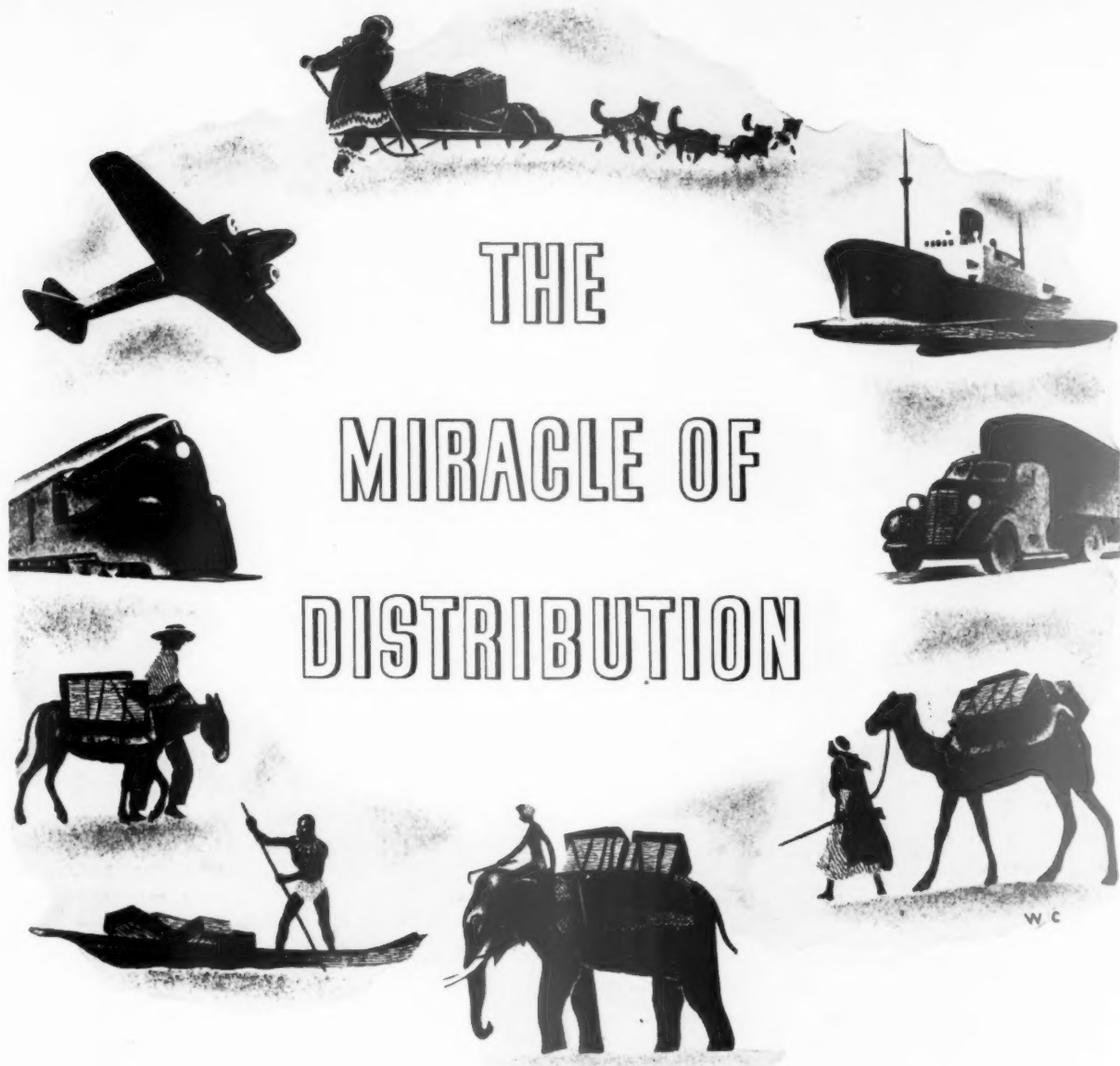
And thus we come at last to the specific questions that *American Business* propounds.

1. Is this company correct in its attitude that the purchasing department should be abolished? In that company, and that particular purchasing department, the answer is an unqualified Yes.

2. Can it be possible that the so-called "savings" made by a hard-boiled, price-conscious purchasing agent are not savings at all, but a liability and an added expense? Yes, that is quite possible; just as possible, for example, as that reciprocal favors may be bought at a price so high that all profit vanishes from the transaction, even though the expense item is transferred to the purchasing account.

3. Would the average, small and medium-sized company be better off if it completely revolutionized its buying methods and abolished the purchasing agent entirely? That's not a Yes or No question. Too much depends on what the buying methods have been, and the typical case, as noted above, can scarcely be judged by the practice of this prominent Atlanta company. There's plenty of room for revolutionizing, but in most cases the course of revolution would be toward more common sense attention to developing the purchasing function and co-ordinating it with general management rather than to abolish the office.

Perhaps these answers aren't the ones contemplated by the questionnaire, but they are honestly given. And as for the article as a whole, which goes "through all the familiar motions" of pandering to sales-minded management, ridiculing the buyer, denouncing price-consciousness, rehearsing the old accusations of chiseling, penny-pinching, graft, and deliberate misrepresentation, there is a good old English word which describes it very accurately. Literally, this word means a snare to catch cheap applause from a partisan and unthinking audience. Yes, Mr. Editor, the article is nothing more or less than claptrap.



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THE MARKET PLACE



*A quick review of the market
noting major developments in
supply, demand and prices of
selected basic commodities*

Supply

Demand

Market

COAL

BITUMINOUS output, averaging better than 10 million tons weekly in February, dipped sharply in the opening week of March, sagged further to 7½ million tons in the second week, and when floods subsequently crippled the Pennsylvania and West Virginia fields the rate was down to a six-months low at less than 5½ million tons. Recovery from this point has been only moderate, with immediate demand very easy and the indication that Great Lakes traffic will open late this season.

DEMAND slackened materially in March. Industrial consumption in the steel areas was curtailed due to flood conditions and there was little tendency to stock ahead. Inventories are not heavy but are apparently satisfactory, while buyers generally withheld any long term contracts due to price uncertainty pending the decision on the Guffey Act.

COAL prices are nominally unchanged, but the market weakness of early March is still in evidence. Quotations on slack are firmer since the curtailed demand for heating sizes has halted the accumulation of slack stocks. Wage negotiations in the anthracite industry are still incomplete, but strike probabilities are discounted. The miners' demands are equivalent to a 27% wage increase. Announcement of the summer price schedules has been deferred until mid-April.



COPPER

DOMESTIC mine production was sustained at about 40,000 tons, refinery production above 50,000 tons, looking toward May deliveries. Stocks represent approximately five months' supply at current rates. The foreign agreement on production curtailment was reaffirmed, world stocks having been reduced some 55,000 tons during nine months of the present plan.

CONSUMPTION has tapered off since the first of the year. March sales, slightly under 36,000 tons, were less than half of the February total, but the earlier month witnessed a sharp buying wave at the time of the price advance. General buying is light, utility buying deferred.

THE dual price structure still prevails, a proposed compromise figure at 9⅜ cents being rejected by both the high and low price groups. Several items of copper and brass tubing were advanced ⅛ to 1 cent on March 27, the rest of the list being unchanged. These prices had been relatively low, and the change is regarded as a matter of general adjustment rather than unusual strength.

COTTON

FINAL production figures on the old crop are in the neighborhood of 10⅓ million gross bales. New crop acreage is now estimated at more than 30 million, about 12% ahead of 1935. An additional lot of 49,000 bales of government pool staple, held in storage in New York, New Jersey, and New England, has been marked for liquidation during April.

WORLD consumption is currently at the record rate of 27 million bales. Domestic consumption in March advanced to 585 thousand bales as mill activity held at better than 100% of single shift capacity for the fifth consecutive month. Mill demand is still confined to immediate requirements. Exports are up and improving.

COTTON prices showed steadily increasing firmness throughout the month, climbing up from 11.25 to 11.62 cents at the close of the month, but lost more than half of this gain on the report of government selling in April. Cotton textiles were also firm, with some constructions commanding a premium. Trading was more active than for some time past.

IRON and STEEL

STEEL production attained a rate of 60% by mid-March, representing about 125 thousand tons daily, the highest rate since July, 1933. Flood conditions caused a recession to 53.7%, but recovery was rapid and the turn of the month saw operations up to a six-year peak at 62% with a general tone of confidence characterizing the industry.

CONSUMPTION was well diversified, with structural items in particularly strong demand. Motor schedules for April show estimated production up to 460 thousand units. This is somewhat below the 1935 figure but is likely to be better sustained throughout the quarter. Flood repair work may require up to 100 thousand tons.

FIRST quarter prices were generally reaffirmed for another three months, but the month showed two outstanding price developments. The first of these was the schedule of quantity price differentials announced by Republic and followed by a number of other producers. The second was the Wheeler bill to repeal the basing point method of quotations.

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LUMBER

SOFTWOOD lumber production advanced sharply in the opening week of March and showed steady expansion throughout the month. The development is more than seasonal and brings operations to about 60% of 1929.

NAVAL STORES

RECEIPTS are beginning to be seasonally heavier. Producers are vigorously opposing release of 140,000 barrels of turpentine currently held as collateral for loans by the CCC.

PETROLEUM

DAILY average production of crude oil mounted during March, due principally to greater output in Oklahoma. In the closing week the daily rate was 2,876,200 barrels, which is 313,000 barrels ahead of 1935 and 138,000 barrels in excess of the Bureau of Mines recommendation. Gasoline in storage also increased.

RUBBER

MALAYAN production is slackening. Stocks, both in the hands of estates and dealers, were reported as increasing early in the month, but the April 1 reports indicated a downward trend. Domestic stocks moderately down.

TIN

THE world's visible supply of tin increased about 1,100 tons in March, and is now reported as 18,663 tons, which is regarded as less than a reasonably safe supply. An informal meeting of the major producing countries was said to be in favor of continuing present production restrictions, with Siam holding out for an increased quota.

ZINC

PRODUCTION of zinc concentration advanced from February levels and again averaged better than 10,000 tons a week in March. Sixty-five mills are now in operation, a new high for the year, two more having opened during the month.

SHIPMENTS and new orders showed substantial improvement during the first half of the month, running considerably ahead of production. Orders slackened in the second half.



VOLUME is fair. The soap and paper industries are still buying on a hand-to-mouth basis, but varnish trade is seasonally improving.

THE expected seasonal trends in demand for petroleum products developed during the month, with motor fuel consumption expanding while the requirements of heating oils subsided rapidly. Demand in general is running considerably behind output.

CURTAILED consumption of crude rubber due to the Akron strike showed a sharper drop than had been anticipated. Factory demand improved in the closing weeks of March, but is still principally for immediate requirements.

PROFESSIONAL trading by importers and dealers was the mainstay of the market. Consumer buying was nominal, chiefly on recessions. Plate operations at 75%, as compared with 80-85% a year ago.



SHIPMENTS have been heavy, though sales were light throughout the month and demand is generally apathetic. The total unfilled orders, which recently exceeded 50,000 tons, have been greatly reduced.

LUMBER prices were for the most part sustained on a firm basis during the month. Southern pine was the exception, receding slightly at mid-month, to 21.45, when buying support weakened.

PRICES have been very irregular. Turpentine broke to 41½ cents on March 27, a new low for the year, but recovered to 44 cents during the first week of April.

THE crude oil price structure remained firm, with some premiums being paid in the Southwest. Tank car prices for heating oil were reduced ¼ to ⅜ cent a gallon. Retail gasoline quotations in the east were drastically slashed as refiners engaged in a price war. The middle western gasoline situation was on a firmer basis.

SPOT rubber prices fluctuated between 15⅞ and 16⅞ cents, the latter figure representing the high mark for the current movement. The general market tone was firm and sensitive to better demand.

TIN prices lost about a cent a pound over the month in dull trading marked by price concessions whenever real business was in sight. The April 1st level of 47⅞ is said to be below import cost and therefore close to a "floor" price. The decline has been of longer duration than usual in this market.

PPRICE levels are unchanged, the advance of late February being firmly maintained in the face of extremely light buying. With unfilled orders insuring operations for some time to come, producers have little reason to recede from their position.



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PERSONALITIES in the NEWS



JOHN P. SANGER, President of the Chicago Purchasing Agents Association and Director of Purchases for the United States Gypsum Company, has been named vice president of the latter organization, in charge of purchases. U. S. G., outstanding company in its field, owns and operates more than fifty plants in the United States and Canada; its materials requirements are large and diversified. Mr. Sanger became associated with the purchasing department immediately following his graduation from Armour Institute of Technology in 1921, and has advanced steadily to his present position of leadership.

MARTIN H. GERRY, III, has resigned as purchasing agent for the Schwabacher-Frey Company, San Francisco, to accept a similar appointment with Stanford University. He will maintain offices in the Administration Building at Palo Alto and at the Stanford Hospital in San Francisco.

T. W. HARRIS, JR., Division Purchasing Agent for E. I. du Pont de Nemours Company, Wilmington, discussed "Technical Consideration of the Factors Involved in the Purchase of Coal" at a meeting of fuel engineers in Cincinnati, March 9th, sponsored by the Fuel Engineering Division of Appalachian Coals, Inc.

GILBERT HARTMAN, Purchasing Agent for the Oilgear Company, Milwaukee, addressed the April meeting of the Tool and Machine Shop Association of that city on "The Small Machine Shop as a Source of Supply."

A. W. ENGEL, of Helena, has been appointed Montana State Purchasing Agent, succeeding T. J. COLLINS, resigned. Mr. Engel was formerly equipment engineer for the State Highway Commission.

AXEL H. KAHN, formerly Purchasing Agent for the G. E. Supply Corporation at San Francisco, has been transferred to Chicago as district manager.

G. C. BYER has been appointed purchasing agent of the Tulsa branch of Parkersburg Rig & Rell Company, succeeding C. C. Witt, who becomes manager of the company's Kansas sub-district at Wichita.

CHARLES F. MARCHANT, Purchasing Agent for the R. E. Dietz Company at New York City, has moved his department to the plant at Syracuse, N. Y.

MAJOR L. O. GRICE has been named purchasing and contracting officer at the Philadelphia Quartermaster Depot, U. S. Army, succeeding Major E. J. Heller, transferred to Washington.

FRED J. LUCAS of Toronto, President of the National Association of Purchasing Agents, addressed the Rotary Club of Riverside, California, at the luncheon meeting March 18th, while making a tour of the West Coast associations.

J. F. BENNETT, Purchasing Agent and Treasurer of the Reynolds Wire Company, Dixon, Ill., is one of the executives ranked as representative

leaders of American industry in the recent compilation made by the Institute for Research in Biography, New York City.

R. C. HOPKINS, Secretary of the Kansas City Purchasing Agents Association, has been elected secretary-treasurer of the Secretaries' Forum of that city.

JOSEPH W. NICHOLSON, City Purchasing Agent at Milwaukee, Wisconsin, addressed a joint meeting of the Kansas Licensed Accountants and the National Association of Municipal Finance Officers, representing Arkansas, Iowa, Kansas, Missouri, Nebraska, North Dakota, Oklahoma and South Dakota, at Topeka, Kansas, on Monday, March 23. His subject was "Municipal Purchasing."

CARLETON REYNELL, Purchasing Agent of the Worthington Pump & Machinery Corp., East Harrison, N. J., is chairman of a committee appointed by the American Society of Mechanical Engineers to develop purchasing information as applied to engineering problems. The personnel of the committee is to be made up of men who hold membership in both A.S.M.E. and N.A.P.A.

THEODORE A. LYNCH, City Solicitor at Cambridge, Mass., has been named acting purchasing agent of that city, succeeding CHARLES A. DELANEY, who resigned after six months of service in the office to return to the field of chain store management.

WOODBURY HALE, Purchasing Agent of the Boston Consolidated Gas Company, recently completed 30 years of continuous service with that company. For more than half of that period, he has been purchasing agent.

Obituary

LAMBERT N. HOPKINS, Purchasing Agent for the Chicago, Burlington and Quincy Railroad from 1905 to 1908, died at Santa Barbara, California, March 18th.

APRIL 1936



CHEMICALS

From A to Z

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From Coast to Coast

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Acetic Acid Redistilled	Calcium Phosphate, Tribasic	Silicate of Soda G.4.S.
Alum—Ammonia U.S.P.	Chromic Acid	Silicate of Soda Lump
Alum—Filter	Delimer K's	Silicate of Soda Meta
Alum—Paper Makers	Duclean—Iron drum cleaner	Silicate of Soda Pulverized
Alum—Pearl	2 Ethyl Hexenal	Silicate of Soda "R-B"
Alum—Potash U.S.P.	Fire Retardants	Silicate of Soda Solid Glass
Aluminum Sulphate	Fixtan A & B	Silicate of Soda Solution
Commercial and Iron Free	Formic Acid	Snowflake Soldering Salts
Aluminum Chloride Crystals	G. B. S. Soda	Sodium Pyrophosphate
Aluminum Chloride Solution	Glauber's Salt	Sodium Formate
Ammonium Nitrate	Glauber's Salt Anhydrous	Sodium—Lead Alloy
Ammonium Nitrate, C.P.	Hypo-Sulphite of Soda Crys.	Sodium—Zinc Alloy
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Aqua Fortis	Indium—metal or oxide	Soldering Flux Solution
Arsenic Acid	Inhibitor No. 3—Non-Foaming	Slab Zinc
Barium Carbonate	Inhibitor No. 8—Foaming	Strontium Carbonate
Barium Chloride	Insecticides and Fungicides	Strontium Nitrate
Barium Sulphate—Blanc Fixe	Lactic Acid	Sulphate of Soda Anhydrous
Battery Acid	Lactic Acid, Edible	Sulphate of Soda Technical
Battery Coppers	Lactic Acid, U.S.P.	Sulphate of Zinc
Battery Zinc	Manganese Nitrate	Sulphide of Soda Concentrated
Bi-Chromate of Soda	Mixed Acid	Sulphide of Soda Crystals
Bi-Chromate of Potash	Mossy Zinc	Sulphide of Soda Flake
Bi-Sulphate of Soda	Muriate of Tin Crystals	Sulphide of Soda Fused Solid
Bi-Sulphite of Soda Solution	Muriate of Tin Solution	Sulphite of Soda Crystal
Bright Zinc	Muriatic Acid	Sulphuric Acid
C.P. Ammonium Hydroxide	Nitric Acid Commercial	Super Sulphate of Soda
C.P. Glacial Acetic Acid	Nitric Acid Engraver's Grade	Thallium Sulphate
C.P. Hydrochloric Acid	Nitric Acid Fuming	Titanium Sulphate
C.P. Nitric Acid	Nogal	Tin Crystals
C.P. Sulphuric Acid	Oleum	Tinning Flux
Cadalyte*	Oxalic Acid	Tri-Sodium Phosphate
Cadalyte Bright Dip	Phosphate of Soda	Zinc Anodes
Cadmium	Phosphate of Soda—Anhydrous	Zinc Chloride Fused
Cadmium Anodes	Phosphate of Soda—Mono	Zinc Chloride Granulated
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AMONG THE ASSOCIATIONS

MARCH 3

Oakland—Luncheon meeting of Oakland group of the **Northern California Association**, at the California Hotel. Speaker: Frank Kester, Marine Editor of the *Oakland Tribune*, "The Romance of Square Rigging."

San Francisco—Weekly session of the educational course, **Northern California Association**. Topic: "Business Cycles and Forecasting," led by Ralph N. Jackson of the Federated Metals Corp.

MARCH 5

San Francisco—Luncheon meeting of the **Northern California Association**. Speaker: K. A. Kennedy, Pacific Division Traffic Manager, Pan American Airways, "Air Transportation."

MARCH 5-6-7

Los Angeles—Annual convention of the **California State, County & Municipal Purchasing Agents Association**, at the Bellevue Hotel.

MARCH 7

Chicago—Annual Ladies' Party of the **Chicago Association**, in the Bal Tabarin, Sherman Hotel. Dinner, dancing, and cards. G. R. Zeiss of the Wahl Company was chairman of the committee in charge.

MARCH 9

Boston—Luncheon meeting of the **New England Association Paper Committee**. Discussion of titanium pigments in paper making, led by William R. Willets of the Paper Development Laboratory, Titanium Pigment Co.

Afternoon conference. Round table discussion of purchasing problems, led by Charles L. Sheldon of Hood Rubber Co.

Monthly dinner meeting at Schrafft's Restaurant. "National Association Night." Speaker: George A. Renard, Secretary of the N.A.P.A., "From One P.A. to Another."

MARCH 10

Tulsa—Meeting of the **Tulsa Association**. Speaker: H. W. Reinhard of Chicago, representing the Brown Company, "Solka."

Oakland—Luncheon meeting of the Oakland group, **Northern California Association**, at the Merritt Hotel. Speaker: Edmond G. Matignon, Metallurgical Engineer of the Apex Foundry, "The Story of Metals."

Cincinnati—Meeting of the **Cincinnati Association**, at the Gibson Hotel. Motion picture on Sponges and Steel Wool, by courtesy of the James H. Rhodes Co., Chicago, presented by Eugene C. Williams, local representative.

San Francisco—Weekly session of the educational course, **Northern California Association**. Topic: "Legal Phases of Purchasing," led by Louis A. Colton of Zellerbach Paper Co., and Elliot M. Epstein, Attorney.

MARCH 11

South Boston, Mass.—**New England Association** inspection visit at the plant of The American Sugar Refining Co., producers of Domino sugar.

MARCH 11-12

Philadelphia—Annual exhibition of industrial products, sponsored by the **Philadelphia Association**, at the Penn Athletic Club.

MARCH 12

Philadelphia—Meeting of the **Eighth District Council, N.A.P.A.** Vice President H. A. Rowbotham, presiding. George M. Tisdale, Purchasing Agent of U. S. Rubber Products, Inc., New York City, now serving his third successive term as president of the New York Association, was elected as District Vice President for 1936-1937.

Chicago—"Executives Night" meeting of the **Chicago Association**, at the Bal Tabarin, Sherman Hotel. Speakers: Sterling Morton, Secretary and Director of the Morton Salt Co., and Vice President of Illinois Manufacturers Association, "The Effect of Social Security and Other Taxes on Buying Policies;" Phil S. Hanna, Editor of the *Chicago Journal of Commerce*, "The Business Outlook."

Seattle—Meeting of the **Washington Association**, at the Washington Athletic Club. Speakers: Fred J. Lucas of Toronto, President of the N.A.P.A., "The National Association's Efforts and Accomplishments;" Prof. J. Demmery of University of Washington, "Current Economic Problems."

Detroit—"Purchasing Agents Day" at the Detroit and Michigan Exposition (March 6-15), at Convention Hall.

MARCH 16

Louisville—Plant visit and meeting of the **Louisville Association**, at the General Box Company. Speakers:

H. W. Embry, Louisville plant manager, and Neil Fowler of Chicago, Vice President in charge of design, both of the General Box organization. S. T. Hull of Colgate-Palmolive-Peet Co., Jeffersonville, was elected president of the association, succeeding A. M. Forrester. Other officers for 1936-37: *Vice Presidents*, O. F. Fausel and Gordon Cox; *Secretary*, L. G. O'Connor; *Treasurer*, J. T. Kinberger; *Directors*, Claude Watkins, Robert Schmitt, and Frank Gentry.

San Francisco—Luncheon meeting of the **Northern California Association**, in honor of N.A.P.A. President Fred J. Lucas.

MARCH 17

New York—Meeting of the **New York Association** at the Builders Exchange Club. Speakers: George Burton Hotchkiss, Professor of Marketing, New York University, "Medievalism in Modern Marketing;" Chapin Hoskins, Managing Editor of *Forbes*, "Why Most Purchasing is Done at the Wrong Time."

Pittsburgh—Meeting of the **Pittsburgh Association** at the William Penn Hotel. Speaker: W. R. Huber, Advertising Manager of Gulf Oil Corp., "Modern Methods of Seeking and Producing Oil," illustrated with a talking motion picture. Additional feature: a specially recorded act by Phil Baker, radio star of the Gulf program, and the usual supporting cast.

Detroit—Executives Night meeting of the **Detroit Association**. Speaker: William S. Knudson, Executive Vice President of General Motors Corp.

St. Louis—Meeting of the **St. Louis Association**, at the York Hotel. Speaker: S. J. McGrath, Technical Director of Phelan-Faust Paint Co., "Recent Developments in Paint Chemistry."

San Francisco—Weekly session of the educational course, **Northern California Association**. Topic: "Transportation," led by William C. Hubner of A. M. Castle & Co.

MARCH 18

Canton, Ohio—Monthly meeting of the **Canton and Eastern Ohio Association**, at the Elks Club. Speaker: George E. Gronemeyer, research engineer for the Babcock & Wilcox Co., who assisted in designing of pipes and penstocks for the Boulder Dam. Mr. Gronemeyer discussed some of the engineering problems on the project, and the testing of materials.

Los Angeles—Meeting of the **Los Angeles Association**, at the Jonathan Club, Cliff Thorburn of the Pacific Electric Railway Co., presiding. Speakers: Fred J. Lucas of Toronto, National President; C. A. Kelley of Riverside, District Vice President; Arthur E. Carlson of Pioneer-Flintkote Co., "Our Ninth Annual Industrial Exposition."

APRIL 1936



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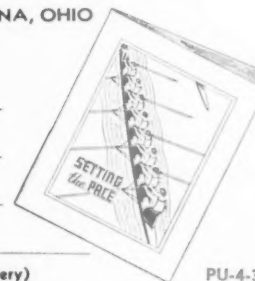
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MARCH 19

Buffalo—Meeting of the **Buffalo Association** at Hotel Statler. Program: "The House of Magic."

Richmond, California—Meeting of the **Northern California Association**. Afternoon visits to various local industrial plants. Dinner meeting at the Berkeley Country Club. Presiding Officer: P. M. Sanford, President of the Richmond Chamber of Commerce. Speakers: Daniel Casey of San Francisco, masquerading as "Thomas Gregory Smith, President of the Liverpool (England) Chamber of Commerce," "Industrial Observations;" Warren H. McBryde, Consulting Engineer, "Richmond and Its Place in the Markets of the World."

MARCH 20

Salt Lake City—Luncheon meeting of the **Utah Association**, at the plant of the Utah Copper Company, Bingham. Dinner meeting at the University Club. Speaker: Fred J. Lucas of Toronto, N.A.P.A. President.

Cleveland—Meeting of the **Cleveland Association** at the Hotel Cleveland. Speaker: Henry M. Busch of the Education Department, Cleveland College, "Raw Materials and the Threat of War."

MARCH 21

Cincinnati—Bowling party of the **Cincinnati Association**, at the Cincinnati Club.

MARCH 23

Bethlehem, Penna.—Meeting of the **Lehigh Valley Association**, at the Bethlehem Club. Speaker: George A. Renard of New York, Executive Secretary, N.A.P.A.

Denver—Meeting of the **Denver Association**, at the Denver Athletic Club. Speaker: Fred J. Lucas of Toronto, N.A.P.A. President.

MARCH 24

Tulsa—Dinner meeting of the **Tulsa Association**. Speaker: C. A. McGinnis of the Johns-Manville Co., "Transite Pipe," illustrated with motion pictures of installations in the Raymond pool in Kansas.

San Francisco—Weekly session of the educational course, **Northern California Association**. Topic: "Business Ethics and Research," led by Martin H. Gerry, III., of Stanford University, and Robert M. Peck of Braun-Knecht-Heimann Co.

Bridgeport, Conn.—Meeting of the **Connecticut Association**, at the Stratfield Hotel. Speaker: Donald G. Clark, Comptroller of Brown & Sharpe Mfg. Co., Providence, "Centralized Purchasing for Municipalities."

Syracuse—Regular meeting of the **Association of Syracuse and Central New York**, at the Hotel Syracuse. Motion picture on the making and processing of stainless steel by courtesy of Republic Steel Corp. Commodity discussion and purchase procedure ("Late Invoices") led by George Fenner, Arthur M. Mann and Stanley Jones.

MARCH 25

Rochester—Joint meeting of the **Rochester Association** with cost accountants, credit men, industrial and retail executives and University faculty, at the Chamber of Commerce. Speaker: Dr. Harold G. Moulton of Brookings Institution, Washington, "Fundamental Trends in American Business."

Dinner meeting of the **Rochester Association**, at the Rochester Club. Motion picture, "The Voice of Business," by courtesy of the Hammermill Paper Co., presented by W. W. Woodbridge.

Akron—Meeting of the **Akron Association**, at the Akron City Club. Speaker: De Loss Walker, Associate Editor of *Liberty*, authority on trade conditions, known as the "Billy Sunday of Business."

MARCH 26

Seattle—Inspection trip of the **Washington Association**, at the Weather Bureau, a clearing point for more than 200 weather reporting stations in Washington, Alaska, and along the coast, providing service for shipping, air lines, forestry, and agriculture.

San Francisco—Luncheon meeting of the **Northern California Association**, at the Palace Hotel. Speaker: Sam J. Hume, Regional Director of the California Crusaders, "The Challenge of Citizenship."

Albany—Second annual "Executive Night" dinner meeting of the **Eastern New York Association**, at the Fort Orange Club. Speaker: R. Smith Payne, Vice President of the Associated Industries of New York State and Chairman of the New York State Employers Conference, "Trends in Social Legislation, and the Effect on Employee and Employer in New York State."

APRIL 25-26

Vancouver, B. C.—Joint meeting of the **Washington, Oregon, and British Columbia Associations**.

MAY 22

Tulsa—"Purchasing Agents Day" at the International Petroleum Exposition.

MAY 25-28

New Orleans—Twenty-first annual Convention and Informashow of the **National Association of Purchasing Agents**, at the Roosevelt Hotel.

Announcement

THIS issue of PURCHASING, consolidated with THE EXECUTIVE PURCHASER, marks more than a change in management. It marks the return to active publishing work of a journal and an organization that pioneered in the field of centralized purchasing, that served its field conscientiously over a span of nearly two decades prior to 1933, and that finds enduring satisfaction in having been identified in some measure with the development of the purchasing function of management from a subordinate and lightly regarded clerical assignment to its present status of effectiveness, influence and recognition.

The many generous expressions of good will that have been received, particularly from purchasing men, since the reorganization of the Boffey Publishing Company was announced in the daily press and in the N.A.P.A. *Bulletin*, have been most heartening. Further, they have impressed us anew with a deep sense of our responsibility. That confidence and trust will be respected and fulfilled to the utmost extent of our abilities and resources.

The staff of PURCHASING has no desire to issue a formal credo or prospectus to its readers. In the future, as in the past, the publication will speak for itself. The organization appreciates and reciprocates the cordial regard and cooperation of the National Association of Purchasing Agents, and of all other agencies working toward the common goal of better buying, and better management through intelligent recognition of the buying function. At the same time it cherishes its position of independence from any association ties, its freedom of thought and action, its service as a forum for the presentation of divergent views so long as they are advanced with sincerity. The editorial policy of PURCHASING has never held with that school of journalism that considers the man-eating shark as the only topic to be criticized in print with impunity, and it promises vigorous opposition

to influences and attitudes that seem to hamper the development of the most effective purchasing practice. It believes that partisan enthusiasm should be tempered with the sane advice against taking oneself too seriously. But it values above all else the opportunity of constructive leadership, the privilege of commending outstanding achievement and progress, and of giving sound, informative service to its field. The

wider scope of its new circulation, nation-wide, reaching all purchasing executives within the continental limits of the United States regardless of association affiliations, offers a correspondingly wider opportunity for such service.

Your cooperation, with comment, discussion and ideas, is earnestly invited. For the chief source of purchasing progress is the laboratory of experience, where methods and materials, policies and personalities, are fused into a purchasing program.

BUSINESS BOOK OF THE MONTH

MAYBE there is something to the Townsend plan after all. Or maybe it is only the indomitable determination of the Brain Trust not to be outdone. But in any event, here is the brilliant Dr. Ezekiel, ranking economist for the Department of Agriculture, upping the old-age pensioner's

outline of his basic proposal does make sense. His concept of social security is not primarily concerned

\$2500 a Year; from Scarcity to Abundance. By Mordecai Ezekiel, Economic Adviser to the Secretary of Agriculture, Past Vice President of the American Statistical Association. 328 pages, with charts and an abstract of an Industrial Adjustment Act. Published by Harcourt, Brace and Company, New York. Price \$2.50.

will be sufficiently strong to support a reasonable old-age benefit program; it is even more probable that the necessity for such a program will be greatly reduced.

The basic data for this treatise is very familiar by now—production capacity that has been only partially utilized even at our peak of industrial activity; the need, the desire, and the ability to consume even in excess of that production capacity; the potential market unrealized because of financial inability to pay for the goods; unemployment and lack of earning opportunities that would provide sufficient buying power, for the simple reason that the market outlet for greater production is not now an effective one. It is the paradoxical picture of want amid plenty. The very fact that the reasoning is circular makes it far from a hopeless situation, but the trouble is that the wheel won't start turning until all parts start moving together. The individual employer, or the individual industry, can do little about it because bucking the economic set-up without virtually unanimous participation means individual disaster. Self-interest, whether on the part of capitalist or worker, under our present system, has frequently been best served by curtailment rather than by expansion, so that there has not been any concerted action toward the greater abundance that would serve the interest of a wider community.

Despite the financial title of this book, the first and vital approach is to think in terms of goods rather than currency. The monetary aspects can't be overlooked, but the

PURCHASING

possibilities of a new national scale of living and of production are first of all a physical consideration. The author estimates that a physical increase of 30% per year in production and consumption, at the outset (an over all figure, not a uniform flat percentage advance in each field) would not be unreasonable and would not throw the machine out of balance. It could be supported, and it would support, a national income based on the \$2,500 minimum earning which corresponds to minimum family requirements on any scale that we would care to acknowledge as a nation.

This minimum income is not a matter of redistribution of existing income or resources. Share-the-wealth programs at best fall short of any permanently satisfactory solution. The wealth to be shared, the increment that is to bring the lower-bracket incomes up to such a minimum, must come from new and additional production activity. To use the author's favorite figure of illustration, we need a bigger pie to divide, rather than reducing the size of some slices in order to increase others.

Three Essentials

Essential to this new plan is a "national blue-print" that will present the situation as a whole, not piecemeal, and that will permit of making the necessary inter-industry adjustments at the very outset, in the interests of the larger goal. That is one lesson we learned from NRA. There is an abundance of statistical data available as to the probable channels of demand, that would assist in building an intelligent and practicable production budget, subject, of course, to periodic revision.

The second essential is a time schedule—an effective date on which all industry will start to operate on the new basis. That's another lesson from NRA. At the time when that program was declared unconstitutional, some accepted codes had already been suspended, while other industries had not yet come

to the point of agreement on their first code draft. The wheel cannot turn smoothly under such circumstances. The exigencies of crop seasons, however, kept AAA marching along pretty well according to schedule, with correspondingly greater effectiveness.

A third principle is to stick to the actual producing industries, involving the basic factor of the volume of goods available for consumption, and leaving out the fields of distribution and personal service. This not only reaches the majority of the low-income workers who are directly implicated in the objectives of the program, but it again emphasizes the physical considerations that are at the root of the plan. And again the experience of NRA confirms the wisdom of this reasoning, for the earlier experiment lost much of its caste in eternal bickerings with the pants-pressers and barbers.

Administration

When, according to this blueprint, the rate of increase for each industrial field has been determined within reasonable limits—a greater percentage for some, and a more moderate increase for others—it may be necessary to provide some sort of a subsidy through government credit. Housing, for example, is one of the greatest needs, yet it might be difficult to interest private capital to the extent required at the start. In other fields, where greater purchasing power would practically assure a market outlet for the greater production, it might be advisable to support the program by assuming unsold surplus stocks, which would be taken into consideration in setting the schedules for ensuing periods, thereby serving only as a governor and providing the safety factor of an "ever normal warehouse" instead of a top-heavy market threat. The experience of the Cotton Pool, the CCC, and the FSCC, do not shake the author's faith in such a process. But in any case, subsidies and benefit payments are to be made for actual production, leading to abundance,



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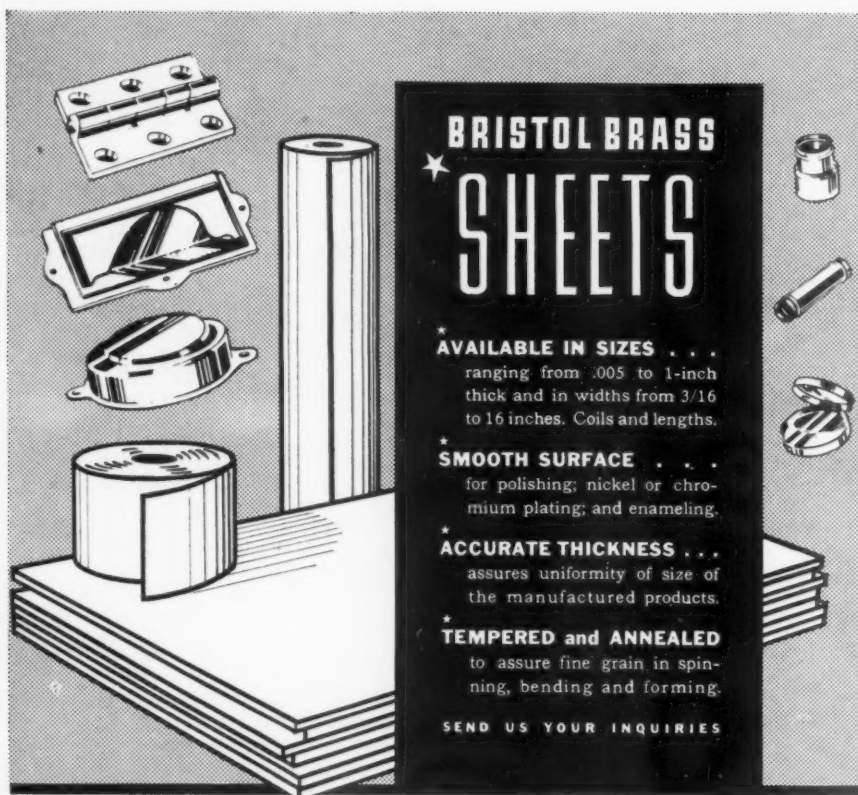
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And now to tie this scheme up with the existing economic order by balancing the financial factors. The objective is three-fold: adequate wage levels on an annual instead of an hourly basis, lowered prices, and unimpaired profits. The practicability of this three-fold aim depends primarily upon savings in unit costs through greater production. It is supported by comparative operating statements from the automobile industry in times of low and high production. In industries involving much hand labor, such as garment making, the savings will not be so great and a different balance will have to be struck. How shall these savings be allocated? This part of the plan will admittedly present the greatest difficulties in reaching an agreement. Human nature being what it is, with self-interest a dominating motive, all parties—capital, labor, and

consumer—are likely to demand the lion's share. But Dr. Ezekiel is confident that the principle of mutual advantage through mutual compromise can be demonstrated.

To administer this scheme, he has worked out a plan that embraces the "code authority" idea of NRA, with greater representation for labor, consumer, and government; the individual contracts with producers, benefit payments, and processing taxes from AAA. He characterizes the plan as thoroughly democratic in principle. He has become disillusioned concerning the altruism of business men and the vision of labor groups. He has high faith in the wisdom and efficiency of governmental direction, but is dubious about the ability to enforce compliance. Consequently the whole program is placed upon a plane where self-interest is best served by compliance, as under the tax provisions of the Guffey coal bill.

On the eve of publication, the Supreme Court decision on the processing taxes was handed down, and the author is frank enough to admit that the same stigma of unconstitutionality consequently attaches to a major part of his own proposal. Other points are similarly dubious. His answer to that is that whereas the Court points out possible dire results from unwise Congressional influencing of industry, it is at least worth while to explore the possibilities of the other alternative—useful and far-sighted governmental adjustments, wisely applied. The draft of an Industrial Adjustment act, appearing as an appendix to this volume, is conceived as an economic document. If the economic foundation is sound and feasible, it is possible that the lawyers and statesmen may find a way to harmonize the law with some means of approaching these objectives.

An Economic Program

It is therefore apparent that this whole proposal, which is presented entirely in an unofficial capacity, is not likely to precipitate any immediate legislative issue, and its mechanisms may be permanently taboo. Nevertheless it is a valuable economic discussion in that it is an attempt logically to chart a course from the situation as it exists to a situation far more desirable from every point of view. Too many economic discussions have contented themselves with "viewing with alarm" or with painting an over-individualistic ideal. If we do not care to follow the course here charted, at least we may look beyond the isolated factors of lowered prices and assurance of minimum annual incomes to see how these may be reconciled with competition and the profit motive. Then perhaps industrial cooperation may incline more toward expanding production and markets than to curtailment as the only means of balance or control, and to a larger share of existing volume as the only aim of competition.

TRADE LITERATURE

Protection against overheating in small motors (open or closed), generators and bearings, is provided by a new visual temperature indicator described in a bulletin of the Ideal Commutator Dresser Co., Sycamore, Ill. It is useful in locating the tendency to overheat before damage occurs, thus preventing burnouts and mechanical failures. Photographs of several typical installations suggest its application in a variety of industries.

Bulletin 117 of Reliance Electric & Engineering Co., Ivanhoe Road, Cleveland, Ohio, describes a series of wound-rotor motors for 2 and 3-phase a.c., said to be more susceptible of external control than the more commonly used squirrel-cage induction motors in applications requiring frequent starting, stopping or reversing, speed variation, and smooth acceleration.

"Operating Costs of Light Duty Trucks" is the subject of a recent report issued by the Policyholders Service Bureau, Metropolitan Life Insurance Co., 1 Madison Ave., New York City. There are 24 actual detailed operating cost tables in the report, taken direct from original records, and arranged for ready comparison with one's own records. Various breakdowns are represented: by truck capacity, length of route, total mileage, geographical regions. The cooperating companies operate in manufacturing, retailing, and public utility fields.

"Printed Forms that Work for You"—an unusual portfolio of business forms compiled by The Munising Paper Co., 1900 Field Bldg., Chicago. This portfolio amounts to a comprehensive treatise on the use of printed forms, proper design, and the convenient use of colored papers in a color system of office and factory forms. Sixteen different specimen forms are included, all reflecting the increased efficiency and improved appearance that results from careful organization of material and appropriate choice of typography. Beyond usual types of forms such as invoices, statements, etc., the portfolio includes many valuable but uncommon forms such as a Mailing List Form, Requisition for Advertising Material for Distributors, Payroll Tax Record, and others.

Lewis-Shepard Co., 246 Walnut St., Watertown, Mass., announces Circular 217, illustrating a variety of industrial wagon trucks specially adapted to the handling of both hot and cold iron and steel products inside the plant.

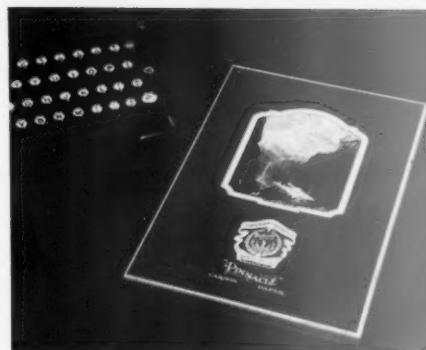
Catalog 1520 of the Link-Belt Co., 307 No. Michigan Ave., Chicago, covers a complete line of anti-friction bearing units in streamlined pillow block, hanger, takeup, flanged, duplex, and special mountings. Five distinct types of bearing units are shown, including three entirely new series that have not been previously announced. One of these is a self-aligning ball-bearing unit; the others are of roller bearing type. The catalog contains 40 pages, 6 x 9, and is well illustrated.

The Four Wheel Drive Auto Company of Clintonville, Wisconsin, has issued a convenient 54 page pocket size handbook tabulating the restrictions as to size and weight of trucks and trailers in each state. This information, essential to any company operating vehicles over state boundaries, is conveniently arranged and indexed by state names, alphabetically. Each page has been checked and interpretations approved by accredited public highway officials in the respective territories.

Folder GEA-2273 of the General Electric Co., Schenectady, N. Y., describes a new inkless cycle recorder which gives a legible pictorial memorandum of the current flow in an a.c. circuit, furnishing a permanent record of elapsed time in the range from 0.01 second to several seconds. One application is the determination of the correct timing for a.c. resistance welders. In this case, exact information is given concerning the number of cycles during which current is supplied to the resistance welder. When the correct timing has been ascertained, the record may be used as a guide in adjusting the timing unit for production work, and may be filed if it is expected that similar welds are to be made in the future. Many other industrial applications can be made.

Ferro Enamel Corporation, Cleveland, Ohio, has just issued a twenty-four page booklet devoted to standard-patterns in its heat resisting-alloy burning tools. These tools are used in the porcelain enameling furnace to support ware while firing. Detailed drawings are shown.

Bulletin No. 42 of the Trane Co., La Crosse, Wisconsin, presents an evaporative condenser unit that is said to cut water costs in refrigerating and air conditioning installations by as much as 90%. The folder contains construction diagram and a table of dimensions and capacities.



IF TYPEWRITERS COULD TALK....

many an excellent machine would ask for a fair chance to do better, without the handicap of a poor ribbon or cheap carbon paper.

From a business standpoint, a typewriter is a good sized investment—and ribbons and carbons an investment so small that the difference between good ribbons and carbons and cheap ones can be measured in terms of only a small fraction of a cent per letter.

The efficiency of a good machine should not be impaired by poor supplies. When you can get the best for so little more, why not do so?

Outstanding Pinnacle values—beauty of write, uniformity and wear—for all duplicating systems, are recognized and rewarded by increasing preference and sales.

Tell us your needs. We will be glad to recommend the proper ribbon or carbon for any regular or special use and to quote you also—entirely without obligation.

P. S. See us at New Orleans!



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**RIBBON & CARBON
MANUFACTURING CO., Inc.**

Main Office and Factory
Glen Cove L. I., New York

BRANCHES
New York, Chicago, Philadelphia, Pittsburgh,
Cincinnati, Nashville, New Orleans, Kansas
City, Milwaukee, Minneapolis, Toronto, Can.

G. A. Renard

Continued from Page 12

N.A.P.A. has no place in this behind-the-scenes recital. That is a matter of record, and the prestige and standing of the association now requires neither explanation nor apology. It is characteristic of George that he never attempts to persuade an individual to join the N.A.P.A. The achievements of the association speak for themselves, he affirms, and no other inducement

is necessary. Well, those achievements speak for what he has accomplished in a service which was literally thrust upon him.

A PRODIGIOUS worker, George devotes seven days a week—and many nights—to his job. He has a tremendous capacity for reading and assimilating the economic, market and political information which streams across his desk. He keeps in touch with all the prominent Washington com-

mentators, but analyzes, rather than accepts, their conclusions, and his keen mind enables him to comment on business and political trends with amazing accuracy. Politically he is a liberal conservative, inclined to believe in the existing order, but ever alert to expose sham, hypocrisy and exploitation in business. Early in the career of NRA he volunteered his personal services and was a pillar of strength to the Consumers Advisory Board. More than any other individual he was responsible for the policies and principles adopted by that Board. In the fall of 1933 he was practically a resident at Washington, yet he slighted none of his association duties in that period. Physically he is an example of perfect health and strength, and he appears to thrive under a burden of work and travel which would crush most men.

At his home in Long Island, George lives with his wife and youngsters. Mrs. Renard—Anne to her friends—is an excellent runner-up to George in the extent of her acquaintance among purchasing agents. Likewise in popularity. She meets them at the association conventions and on occasions when out-of-town members bring their wives and daughters to New York for a visit, and always she is a ready and charming hostess. The son, Walter, is a budding industrialist. He is co-inventor of a jack for use in service station pits. Manufacturing rights have been sold, production has been started, and Walter hopes for an early stream of royalty checks. Experts who have examined the device proclaim that hope to be well-founded. Suzanne, the daughter, is a lovely lass of outstanding mental and physical talent. Adept at dancing, swimming, tennis, basketball and field hockey, she was elected president of the Girls Athletic Association at Great Neck High School and accorded leadership of the school in athletics by vote of the various sports directors. For a month or two after her graduation a year ago she wavered in choice of a career, but settled the matter triumphantly in August



DEMAND THIS LABEL

on every bale of wiping cloths you buy

The specifications of products of members of The Sanitary Institute of America cover not only sterilization, but also size, texture and color of each recognized grade of wiping cloths. The Label is your assurance of safety. It's good business to buy from an Institute Member.

This Advertisement sponsored by the following Companies

BROOKLYN . Delia Waste Products Corp. . 1557-61 Dean St., President 3-7300
CLEVELAND . Manufacturers Supply Co. . 3528 East 76th St., Michigan 7200
PITTSBURGH . Armstrong Sanitary Wipers Co. . 916 Forbes St., Atlantic 8250
PLAINVILLE, CONN. . R. A. Mont & Company, Inc. . Tel. Plainville 499
ST. LOUIS . Wiping Materials, Inc. . 2000-28 N. Main St., Central 9535

by marrying Stewart Kennedy, an up-and-coming youngster in textile circles.

A genial host, George delights particularly in bringing together at his home a group of varying political and philosophical beliefs, and edging them into discussion. He joins in, upholding most of the argument that contends for higher standards of life and industry, but he has little patience with "isms" as such. Liberalism should be practical, he affirms, and the practical method is to correct the existing system instead of seeking to destroy it.

Withal, he is a sensitive soul. He makes light of his disablement, but he resents any conspicuous effort to relieve him of normal chores. And with good reason, for he is dexterous as any two-armed man. He invites criticism and has the rare faculty of seeing the other person's viewpoint, even when it is contrary to his own convictions, but picayune complaints from carp-

ing members send him into a blue streak. His platform poise is remarkable, particularly in the discussion period which usually follows his formal speeches, but on one occasion it deserted him. That was at the 1933 N.A.P.A. Convention, when he was awarded the Shipman Gold Medal for conspicuous service to the purchasing profession. He stood mute, tears streaming from his eyes, at the tribute which surprised him but nobody else in the vast audience seated in the banquet hall. Yet it was one of the most eloquent moments of his career, for it revealed what George Renard means to purchasing agents—and purchasing agents to George.

—L. F. B.

Municipalities Plan Co-operative Buying

Eugene, Oregon—At the annual convention of the League of Oregon Cities, March 19-20, it was voted to take preliminary steps toward co-operative purchase of various supplies used in common by the 117 member cities. The first project to be undertaken by Secretary Herman Kehrli on behalf of the League will be the purchase of fire hose. Other items will be similarly handled in the future.

Buying Offices Merged

Duluth, Minn.—The purchasing office of St. Louis County Road Department, Southern Division (A. W. Johnson, Purchasing Agent) moved into the quarters of the general County Purchasing Department (H. L. Fedi, Purchasing Agent) last month. The purchasing office of the Northern Division of the Road Department (William McCabe, Purchasing Agent) will remain at Hibbing.

*We have Reduced
our Typing, Mailing,
and Filing Costs
by using*



ESLEECK THIN PAPERS

They are strong and durable, yet have minimum bulk. Their lightness and strength combined, allow us to make numerous clean, clear carbon copies. We use them now for Thin Letterheads on all our Branch Office, Foreign and Air Mail Correspondence. We also use some of the many distinctive colors for our office records and factory forms.


FIDELITY ONION SKIN
100% RAG

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25% RAG

SEND FOR SAMPLES

ESLEECK MANUFACTURING COMPANY
TURNERS FALLS, MASSACHUSETTS



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(AFRICAN)
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Refiners and Makers
of

**ABRASIVE GRAINS
AND
FLOURS**

AMERICAN ABRASIVE COMPANY
WESTFIELD, MASS.

NEW PRODUCTS & IDEAS



**CARTON
SEALER**

No. 195

AN inexpensive tool for sealing corrugated and fibre shipping containers of the overlapped type by stapling the flaps. The special "S" anvil construction permits this device to slide along the overlapped flap and drive the staples from end to end in one simple continuous operation, saving time in the shipping department, and producing a package that is virtually proof against damage-in-transit losses.

See coupon below



**VIBRATION
INSULATOR**

No. 196

A HIGH degree of vibration isolation for medium and light machinery has been achieved in this new mounting. The machine is directly supported by a T-iron, which is separated from a base of two angle irons by natural cork or other isolating material. The angle irons are firmly connected by bolts passing through the isolating materials and through clearance holes in the T-iron. Before installation these bolts are adjusted to produce a precompression of the isolating material to suit the machine load. Further adjustment can easily be made after installation. Where machine frame is light or must be supported at several points the T-iron can be extended to form a continuous

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PAGE 42

support between two or more dampers. This eliminates undue bending stresses in the machine frame. The mounting is built in sizes ranging from 100 to 2,500 pounds capacity.

See coupon below

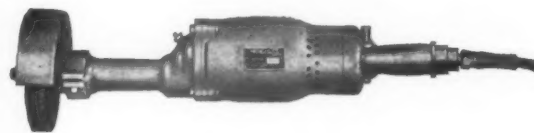


**CONVERTIBLE
LADDER**

No. 197

A STEP ladder than can be adjusted at any desired leg spread or used as a straight double-length ladder. The two halves are joined with geared malleable hinges, each hinge provided with thumb-screw lock. The steps on one half are trussed; hickory rounds with steel washers are used on the other half. It is equipped with safety rubber feet and a removable platform. It can also be used with one leg set horizontally on stairs or other support, making a firm and serviceable elevated work platform. Available in 9, 11, 13 and 15 foot lengths, folded.

See coupon at left



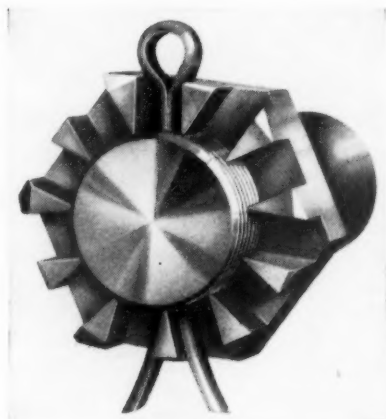
PORTABLE GRINDER No. 198

THIS grinder and buffer is available in two speeds—5,400 and 8,500 R.P.M. It handles a 4 × 1 inch grinding wheel or a 4 × 2 inch buffing wheel. Overall length: 22½ inches. Weight: 15½ pounds, including pressed steel wheel guard. The motor is a squirrel-cage unit, 180 cycle, 3 phase, 220 volts, with welded stator laminations and ventilated solid copper-bar rotor. Can be supplied with 110 volt motor if desired. The gears are of har-

PURCHASING

dened alloy steel, and the shafts ride in sealed ball bearings. Standard equipment includes 25 feet of 4-conductor cord and a quick-change cable connector plug.

See coupon page 42

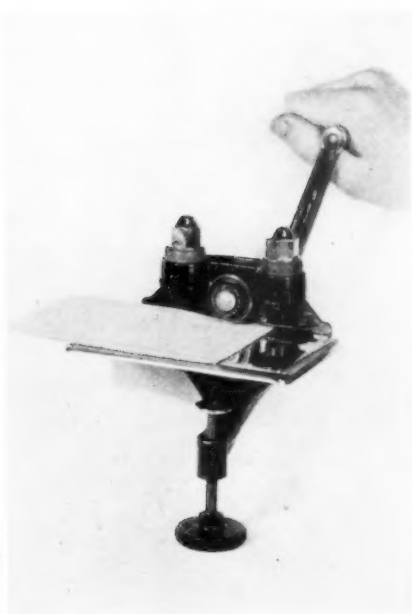


MICRO SLOTTED NUT

No. 199

BY locating the keying wedges off center from one another, so that two keying positions are possible for each slot, this new nut offers from 10 to 22 adjustments per turn (depending on size) instead of the usual 6 per turn with standard slotted nuts. At keying position, a wedge centers the hole. If hole and wedge are not in keying position at first trial, a slight tightening will bring a wedge into position at one end or the other of the hole, for the key can be inserted from either end. Because of this closer adjustment there never is an occasion for backing off the nut to get a keying position, or of tightening with shims. The key is set by simply tapping it in with a hammer. No pliers needed. The key spreads automatically, curving outward, and filling the space between wedge and sides of the hole, locking bolt, nut and key immovable. A special key accompanies each nut. The end of the key is trimmed off to an internal V-shape so that it spreads readily around the keying wedge on the nut, never catching on the wedge.

See coupon page 42



PAPER CRIMPER

No. 200

THIS new device, attachable to desk or table, fastens papers firmly by crimping them together, without the use of any supplies such as pins, clips, staples, glue, etc., and with nothing

Is it different...?

is it New?

You bet it is! New and different! Patented!
ZIP—just a touch of your thumb and this
KURLY KLIP opens up to take—and hold—
a pack of papers 1/4 inch thick. Or a tissue.
Lies flat...can't cut envelopes. Won't fly off.
Refuses to pick up other papers. Air-thin...spring
steel-strong...usable a hundred times over.
Actually saves 50% in filing space.

Send \$1.00 for 3000—(Introductory Offer)—
Postpaid east of the Rockies. Ask us for better
prices in quantity. Then you, yourself, can see how
a **KURLY KLIP** takes all the "cuss" out of the entire
paper clip discussion. And you, too, will say—

It is Better

Sold DIRECT to YOU—Factory Representatives in Principal Cities.
A Complete Line—Typewriter and Other Inked Ribbons—Car-
bon Papers—Inks and Writing Fluids—Office Pasters—Mucilages—
Paper Clips—Other Office Accessories

**KURLY
THE KLIP**

THE RANDALL CO.
1500 SPRING GROVE AVENUE
CINCINNATI

Manufacturers of Typewriter and Other Inked Ribbons—Carbon Papers—
Inks and Writing Fluids—Office Pasters—Mucilages—Paper Clips
—and Other Office Accessories

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CARBON PAPER and TYPEWRITER RIBBONS

... **A**RE as necessary to your office as bread and butter to your table. For this reason we maintain branch offices in the cities listed which are manned by trained specialists at your service who can help you by bringing their vast experience in the selection of the proper carbon paper and typewriter ribbons and carbonized rolls for your various needs—

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For quick service each branch carries a complete line of—

CARBON PAPERS

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Addressograph	Fanfold	Noiseless
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Elliott Fisher	Stamp	Time Clock
	Typewriter of all kinds	

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to clog or get out of order. Useful for attaching enclosures to letterheads or invoices, for filing purposes, for fastening wrappers, for sealing pay envelopes in a single operation that effectively prevents tampering without destruction of the envelope, and for many similar applications.

See coupon page 42

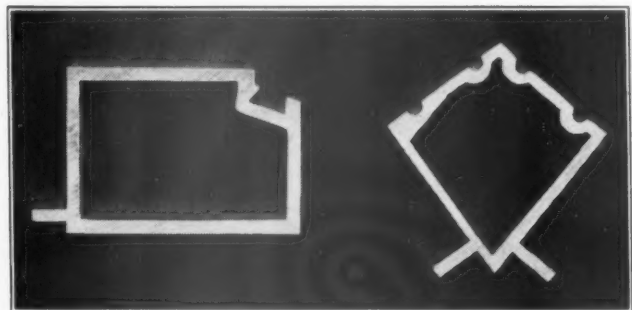
LUBRICATORS



No. 201

THE two new lubricator units shown are (at left) a constant-level type which is designed to maintain a constant level of oil in a ring or ball bearing by feeding the oil whenever the level drops below a stated point, automatically shutting off when that level is restored; (at right) a drip type for solid, wick, or waste-packed bearing. The latter is available in three sizes and can be fitted to most standard bearings without drilling or tapping.

See coupon page 42



EXTRUDED ALUMINUM No. 202

A NEW extrusion process for aluminum produces one-piece hollow sections for product manufacture in such fields as doors, window sash, screen frames, architectural work, and for

GUARANTEED UNBREAKABLE
MARVEL
High-Speed-Edge
Hack Saw Blades

Genuine 18% Tungsten High Speed Steel Teeth

Unbreakable Alloy Steel Body

Patented Electric Weld

Box for box MARVEL BLADES will out-cut and outlast all others for these patented blades combine the best features of all other types, still share the weaknesses of none—have the fast-cutting, long-lasting quality of Genuine High-Speed Steel and at the same time are shatter-proof, are GUARANTEED NOT TO BREAK. For use on all hack saw machines. They cost no more than "ordinary" high speed blades.

Write for Circular **Armstrong-Blum Mfg. Co.** "The Hack Saw People"
360 N. Francisco Ave., Chicago, Ill., U.S.A.

other industrial purposes. The wall thickness is uniform, the process economical and capable of adaptation to a wide range of design.

See coupon page 42

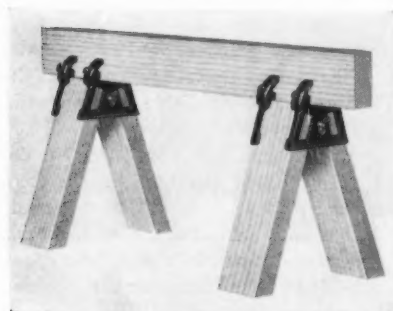


RESPIRATOR

No. 203

A NEW bulb valve type respirator featuring large filter apertures and chambers and an exhalation valve that offers a minimum of resistance, resulting in exceptionally easy breathing. This, plus light weight and self-adjusting face cloth, make for wearing comfort. The slower speed of air through the filter pads increases its efficiency in catching dust and spray. Positive protection against smoke, paint spray, light fumes, vapors and dust down to fine silica, 325 mesh.

See coupon page 42



SAW-HORSE BRACKET

No. 204

MALLEABLE iron clamps to fit standard sizes of lumber provide a modern means of assembling saw-horse type of supports for scaffolding, staging, portable tables and benches.



KRON

DIAL SCALES

For
INDUSTRIES'
EVERY NEED

THE KRON CO.
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APRIL 1936

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Inches . . .

Hours . . . Minutes

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Super-swift, **NATION-WIDE** Air Express makes short work of vast distances. Shipments can be rushed 2,500 miles overnight — coast-to-coast, border-to-border — with next morning delivery.

- * Especially valuable for rush shipments of all kinds.
- * Day and night service.
- * Prompt pick-up and special delivery of shipments at no extra charge, door-to-door.
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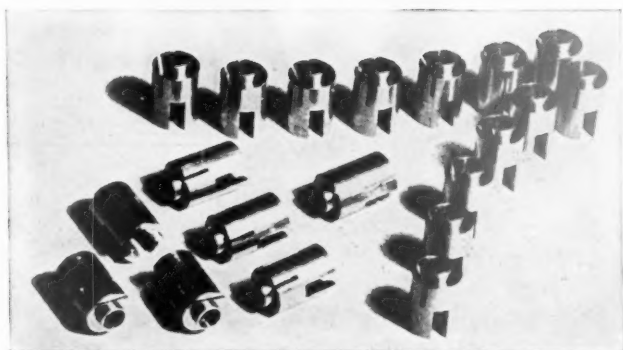
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For service or information telephone any Railway Express office.

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“Hubs”!

Brass hubs for rules having the curved steel tape. Smooth assembly of rule and smooth operation of tape depend on strict accuracy of this part. Hole must be centered, shoulders square, slots correct and over-all length exact, else it won't slip into place. Not the hardest of jobs, but easy to go wrong on.

Because “Peck Service” is interested service, every job is set up right and kept under wing till the last part drops into the pan. If something besides mere routine appeals to you,

*SEND FOR CATALOG
showing the full scope of Peck Service*

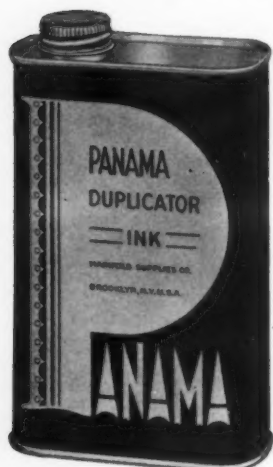
PECK SPRINGS AND SCREW MACHINE PARTS

The Peck Spring Co. - 10 Walnut St. - Plainville, Conn.

PAGE 45

PANAMA

DUPLICATING INK



Spells economy!

Gives you 2,000 to 3,000 more copies per pound of ink.

"IT S-P-R-E-A-D-S
THROUGH THE
THREADS WITH
LOADS OF
COLOR"

Ask Your PANAMA Man

MANIFOLD SUPPLIES COMPANY

Manufacturers of

PANAMA and BEAVER

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BUCKEYE PRODUCTS



THE
LEADERS
OF
INDUSTRY
BUY
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We solicit
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Telephone No.
Michigan 6535

THE BUCKEYE FORGING CO.

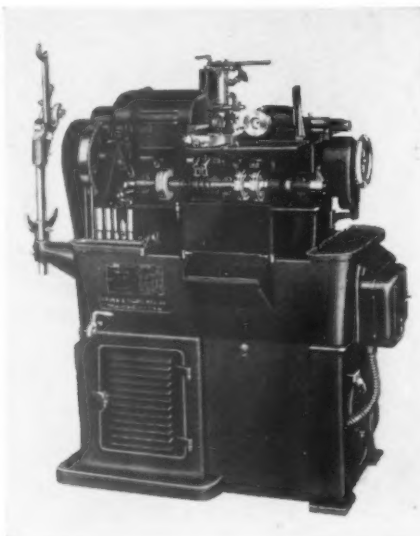
10003 Harvard Avenue

Cleveland, Ohio

With this device, any desired height can be quickly and readily attained, and the resultant assembly is rigid and safe, free from side-sway, spreading or disjoints.

See coupon page 42

AUTOMATIC SCREW MACHINE

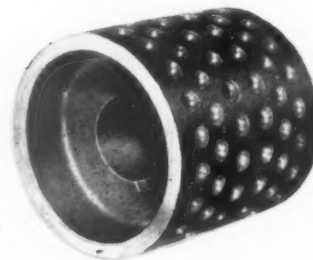


No. 205

SEVERAL major changes in design have resulted in a marked increase in the usefulness and productive capacity of this widely known high speed automatic screw machine, for motor drive only. Previously, machining limitations of the stock used, or limitations of the machine itself, often necessitated handling the job on another size machine where the correct surface speeds could be obtained. Now, however, it is possible quickly to obtain the correct speeds for any job up to $\frac{3}{8}$ " diameter ($\frac{1}{2}$ " diameter on light work) on this one machine, whether the material being used is hard steel, free cutting steel, brass or any of the freer cutting materials. There are now available 36 changes in spindle speed, the range extending from a new low speed of 200 R.P.M. to a new maximum of 6,000 R.P.M., permitting the desired surface speeds for handling either the hard or the free-cutting materials. Improvements have been made to permit making the spindle speed changes with greater ease and quickness, and metal plates with diagrams and charts of the spindle speed change and feed change mechanisms are mounted on the machine adjacent to the respective mechanisms. Various structural changes make for more positive and accurate operation. The new machine is available, also, in simplified form for work not requiring all of the functions of the full automatic.

See coupon page 42

VACUUM CUP PULLEY



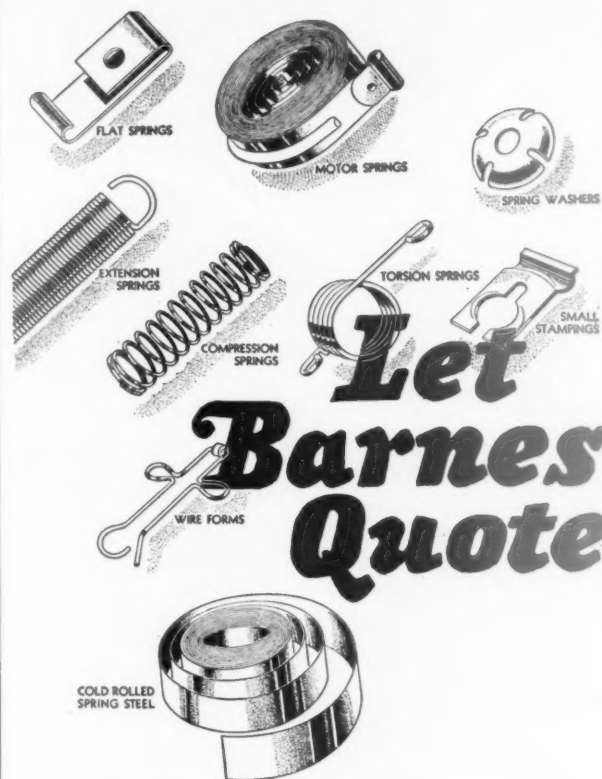
No. 206

A LARGE number of small recessed pockets in the surface of this flat belt pulley act as vacuum cups that seal the belt to the pulley at point of contact. This action eliminates slippage without impairing the freedom of travel, resulting in maximum power at lower belt tension, reduced wear, less strain and friction on bearings, and smoother delivery of power.

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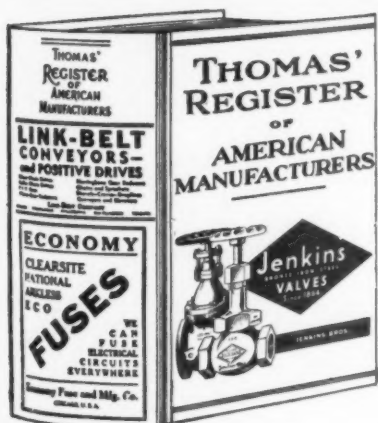
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